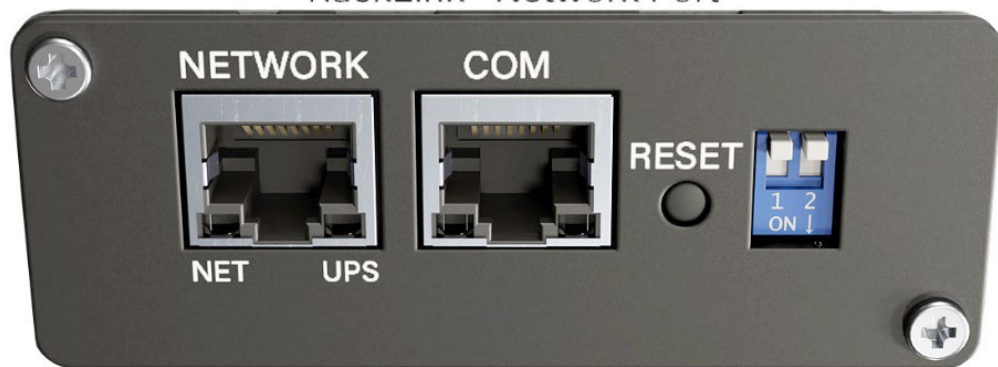


**MIDDLE
ATLANTIC**
A brand of **legrand**

RackLink™ Network Port



NEXSYS™

UPS RackLink™ Network Card

User Manual

100-00074 Rev A



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Table of Contents

Important Safety Instructions	5
Supplied Components and Hardware	13
Required Tools	13
Introduction	14
Features	14
Feature Set	15
Front of Network Card	15
Top of Network Card	15
Installing Your RackLink Network Card (If Applicable)	16
Understanding Network Card Configuration Methods	17
Understanding Network Access to Your UPS	17
Understanding Default Administrative Account Setting	18
Locating the Card on Your Network Using DHCP and the Device Discovery Tool	18
Configuring a Workstation Static IP Connected Directly or via Switch	18
Accessing Your IP Address on the LCD Menu	22
Connecting to Your Network Card Using the Web Interface	22
Using the Web Interface Setup Utility	26
Connecting to Your Network Card Using a Virtual Terminal Client over a Network Connection	28
Connecting to Your Network Card Using a Virtual Terminal Client over a COM Port Connection	30
Configuring Your Network Card Using a Virtual Terminal Client	32
Using the User Manager Menu	34
TCP/IP Settings	36
Network Parameter	38
Time Server	39
Soft Restart	41
Default Reset	41
Exit Without Saving	42
Save and Exit	42

Configuring Your Network Card Using the Web Interface	43
Using the Dashboard	44
Using the Dashboard >> UPS Events Block	45
Using the Dashboard >> UPS Environmental Sensors Block	45
Using the Dashboard >> UPS Device Status Block	46
Using the Dashboard >> Outlet Control Block – Outlet Models	46
Using the Dashboard >> Outlet Control Block – Bank Models	48
Using the Monitor Functions	49
Using Monitor >> Information Pages	49
Using Monitor >> History Pages	53
Using Monitor >> Environment Pages	55
Viewing Monitor >> About >> Information	57
Configuring and Controlling Your Device Using Device >> Management Pages	58
Using the Device >> Management >> Reaction Page	58
Using the Device >> Management >> Configure Page	61
Using the Device >> Management >> Control Page	65
Using the Device >> Management >> Weekly Schedule Page	71
Using the Device >> Management >> Specific Schedule Page	72
Using the Device >> Management >> Event Level Page	74
Configuring System Settings	74
Using System >> Administration Pages	75
Using System >> Notification Pages	89
Troubleshooting	107
Installing The Device Discovery Software on a PC	113
Installing The Device Discovery Software on a Mac	115
Using Device Discovery	117
Warranty	118

Important Safety Instructions

Comply with all warnings and operating instructions in this manual and save them for future reference. Do not operate this unit before carefully reading through all safety information and operating instructions.

Understanding Safety Symbols



**DANGER
HAZARDOUS
VOLTAGE**

The lightning flash with the arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



WARNING

A warning alerts you to a situation that could result in serious personal injury or death.



CAUTION

A caution alerts you to a situation that may result in minor personal injury or damage to the product and/or property.



NOTE

A note is used to highlight procedures pertaining to the installation, operation, or maintenance of the product.

Transportation and Storage



Transport the UPS system only in the original package to protect against shock and impact.



The UPS must be stored in a ventilated and dry room.

Preparation



Condensation may occur if the UPS system is moved directly from cold to warm environments. The UPS system must be absolutely dry before being installed. Please allow at least two hours for the UPS system to adjust to the environment.



Do not install the UPS system near water or in damp environments.



Do not install the UPS system where it would be exposed to direct sunlight or near a heater.



Do not block ventilation holes on the UPS housing.

Installation



Do not connect appliances or devices to the UPS output sockets or terminal that would over load the UPS.



Place cables in such a way that no one can step on or trip over them.



Do not connect domestic appliances such as hair dryers to UPS output sockets.



Connect the UPS system only to a grounded, shockproof outlet, which must be easily accessible and close to the UPS system.



Use only a VDE-tested, CE-marked (or UL-marked for 100/110/115/120/127 Vac models) mains cable (e.g. the mains cable of your computer) to connect the UPS system to the building wiring outlet (shockproof outlet).



Use only VDE-tested, CE-marked (or UL-marked for 100/110/115/120/127 Vac models) power cables to connect the loads to the UPS system.



When installing the equipment, ensure that the sum of the leakage current of the UPS and the connected devices does not exceed 3.5mA.



Temperature Rating: Units are considered acceptable for use in a maximum ambient environment of 104°F (40°C).



For Pluggable Equipment: The socket-outlet shall be installed near the equipment and shall be easily accessible.



The unit is heavy. Lifting the unit requires a minimum of two people.

Operation



Do not disconnect the ground conductor cable on the UPS or the building wiring terminals at any time since this would cancel the protective earth of the UPS system and of all connected loads.



The UPS system features its own, internal current source (batteries), therefore, the UPS output sockets or output terminal blocks may be electrically live even if the UPS system is not connected to the building wiring outlet.



In order to fully disconnect the UPS system, first press the “OFF” button, and then disconnect the mains.



Ensure that no liquid or other foreign objects can enter into the UPS system.



The EPO, RS-232 and USB circuits are an IEC 60950-1 safety extra low voltage (SELV) circuit. This circuit must be separated from any hazardous voltage circuits by reinforced insulation.

Maintenance, Service and Faults



The UPS system operates with hazardous voltages. Repairs may be carried out only by qualified maintenance personnel.



Risk of electric shock. Even after the unit is disconnected from the mains (building wiring outlet); components inside the UPS system are still connected to the battery and are electrically live and dangerous.



Before performing any service and/or maintenance, disconnect the batteries and verify that no current is present and no hazardous voltage exists on the terminals of the high capability capacitor, such as BUS-capacitors.



Only persons are adequately familiar with batteries and with the required precautionary measures may replace batteries and supervise operations. Unauthorized persons must be kept well away from the batteries.



Risk of electric shock. The battery circuit is not isolated from the input voltage. Hazardous voltages may occur between the battery terminals and the ground. Before touching, please verify that no voltage is present.



Do not dispose of batteries in a fire. The batteries may explode.



Do not open or mutilate batteries. Released electrolyte is harmful to the skin and eyes. It may be toxic.



Batteries may cause electric shock and have a high short-circuit current. Please take the precautionary measures specified below and any other measures necessary when working with batteries:

- Remove watches, rings, or other metal objects.
- Use tools with insulated handles.
- Wear rubber gloves and boots.
- Do not lay tools or metal parts on top of batteries.
- Disconnect charging source and load prior to installing or maintaining the battery.
- Remove battery grounds during installation and maintenance to reduce likelihood of shock. Remove the connection from ground if any part of the battery is determined to be grounded.



When changing batteries, install the same number and same type of batteries or battery packs.



For UPS with internally mounted battery:

- Instructions shall have sufficient information to enable the replacement of the battery with a suitable manufacturer and catalogue number.
- Safety instructions to allow access by Service Personnel shall be stated in the installation/service handbook.
- If batteries are to be installed by Service Personnel, instructions for interconnections, including terminal torque, shall be provided.




Do not attempt to dispose of batteries by burning them. This could cause an explosion.





Do not open or destroy batteries. Escaping electrolyte can cause injury to the skin and eyes. It may be toxic.




Only replace the fuse with the same type and amperage to avoid fire hazards.

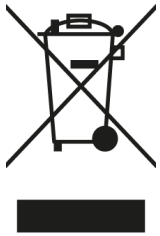
 Do not disassemble the UPS system.

 This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

 Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

 This is a product for commercial and industrial applications. In second environment installations, restrictions or additional measures may be needed to prevent disturbances.

Waste Electrical and Electronic Equipment (WEEE) Directive



Correct disposal of this product: This symbol indicates that this product must not be disposed of with household waste, according to the WEEE Directive (2012/19/EU) and your national law. This product should be taken to a collection center licensed for the recycling of waste electrical and electronic equipment (EEE). The mishandling of this type of waste could have a possible negative impact on the environment and human health due to potentially hazardous substances that are generally associated with EEE. At the same time, your cooperation in the correct disposal of this product will contribute to the efficient use of natural resources. For more information about where you can take your waste equipment for recycling, please contact your local city office or your household waste collection service.

Instructions Importantes Sur La Sécurité

Respectez tous les avertissements et consignes d'utilisation de ce manuel et conservez-le pour référence ultérieure. Ne faites pas fonctionner cet appareil avant de lire attentivement toutes les informations de sécurité et les instructions d'utilisation.

Comprendre Les Symboles De Sécurité



DANGER TENSION DANGEREUSE

Le symbole de la pointe de flèche, dans un triangle équilatéral, est destiné à alerter l'utilisateur sur la présence de tension dangereuse non isolée dans l'enceinte du produit qui peut être d'une ampleur suffisante pour constituer un risque d'électrocution.



AVERTISSEMENT

Un avertissement vous avertit d'une situation pouvant entraîner des blessures graves ou la mort.

**ATTENTION**

Une attention vous avertit d'une situation pouvant entraîner des blessures mineures ou des dommages au produit et/ou à la propriété.

**REMARQUE**

Une remarque est utilisée pour mettre en évidence les procédures relatives à l'installation, au fonctionnement ou à l'entretien du produit.

Transport et stockage



Transportez le système UPS uniquement dans son emballage d'origine pour le protéger contre les chocs.



L'onduleur doit être stocké dans une pièce ventilée et sèche.

Préparation



De la condensation peut se produire si le système UPS est directement déplacé d'un environnement froid à un environnement chaud. Le système UPS doit être absolument sec avant d'être installé. Veuillez prévoir au moins deux heures pour que le système d'ASI s'adapte à l'environnement.



N'installez pas l'onduleur à proximité d'eau ou dans un environnement humide.



N'installez pas le système UPS à un endroit exposé à la lumière directe du soleil ou à proximité d'un appareil de chauffage.



Ne bloquez pas les trous de ventilation sur le boîtier de l'onduleur.

Installation



Ne connectez pas de périphériques à la sortie de l'onduleur ou à un terminal susceptible de surcharger l'onduleur.



Placez les câbles de manière à ce que personne ne puisse marcher dessus ou trébucher dessus.



Ne connectez pas d'appareils domestiques tels que des sèche-cheveux aux prises de sortie de l'ASI.



Ne connectez le système ASI qu'à une prise de terre protégée contre les chocs, qui doit être facilement accessible et proche du système ASI.



Utilisez uniquement un câble d'alimentation certifié VDE, marqué CE (par exemple, le câble d'alimentation de votre ordinateur) pour connecter le système UPS au câblage du bâtiment sortie (sortie antichoc).



Utilisez uniquement des câbles d'alimentation VDE, marqués CE pour connecter les charges au système UPS.



Lors de l'installation de l'équipement, assurez-vous que la somme du courant de fuite de l'onduleur et des périphériques connectés ne dépasse pas 3.5 mA.



Température nominale: Les unités sont considérées acceptables pour une utilisation dans un environnement ambiant maximal de 40°C (104°F).



Pour les équipements enfichables: La prise de courant doit être installée près de l'équipement et doit être facilement accessible.



L'unité est lourde. Le levage de l'unité nécessite un minimum de deux personnes.

Fonctionnement



Ne déconnectez pas le câble du conducteur de mise à la terre de l'onduleur ou des bornes de câblage du bâtiment car cela annulerait la mise à la terre de protection de l'onduleur et de toutes les charges connectées.



Le système ASI dispose de sa propre source de courant interne (batteries). Par conséquent, les prises de sortie ou les borniers de sortie de l'ASI peuvent être sous tension même si le système ASI n'est pas connecté à la sortie du bâtiment.



Pour déconnecter complètement le système UPS, appuyez d'abord sur le bouton "OFF", puis débranchez le secteur.



Assurez-vous qu'aucun liquide ou autre corps étranger ne puisse pénétrer dans le système ASI.



Les circuits EPO, RS-232 et USB sont des circuits de très basse tension de sécurité (TBTS) CEI 60950-1. Ce circuit doit être séparé de tout circuit de tension dangereux par une isolation renforcée.

Maintenance, Service et Défaux



Le système UPS fonctionne avec des tensions dangereuses. Les réparations ne peuvent être effectuées que par du personnel de maintenance qualifié.



Risque de choc électrique. Même après que l'appareil est déconnecté du secteur (prise de câblage du bâtiment); les composants à l'intérieur du système UPS sont toujours connectés à la batterie et sont sous tension et dangereux.




Avant d'effectuer toute opération de maintenance, déconnectez les batteries et vérifiez qu'il n'y a pas de courant et qu'aucune tension dangereuse n'existe sur les bornes du condensateur haute capacité, telles que les condensateurs BUS.





Seules des personnes connaissent bien les batteries et, avec les mesures de précaution requises, peuvent les remplacer et superviser les opérations. Les personnes non autorisées doivent être tenues à l'écart des batteries.



Risque de choc électrique. Le circuit de la batterie n'est pas isolé de la tension d'entrée. Des tensions dangereuses peuvent se produire entre les bornes de la batterie et le sol. Avant de toucher, vérifiez s'il n'y a pas de tension.

 Ne jetez pas les piles dans un feu. Les piles peuvent exploser.

 N'ouvrez pas et ne mutilez pas les piles. L'électrolyte libéré est nocif pour la peau et les yeux. Cela peut être toxique.


 Les batteries peuvent provoquer un choc électrique et un courant de court-circuit élevé. Veuillez prendre les mesures de précaution suivantes et toutes les autres mesures nécessaires lorsque vous travaillez avec des batteries:


- Retirez les montres, bagues ou autres objets métalliques.
- Utilisez des outils avec des poignées isolées.
- Portez des gants et des bottes en caoutchouc.
- Ne posez pas d'outils ou de pièces métalliques sur les batteries.
- Débranchez la source de charge avant d'installer ou de maintenir la batterie.
- Retirez les masses de la batterie pendant l'installation et la maintenance afin de réduire les risques de choc. Retirez la connexion de la masse si une partie de la batterie est déterminée pour être mise à la terre.

 Lorsque vous changez les piles, installez le même numéro et le même type de piles ou de batteries.


 Pour onduleur avec batterie interne:


- Les instructions doivent contenir suffisamment d'informations pour permettre le remplacement de la batterie par un fabricant et un numéro de catalogue appropriés.
- Les instructions de sécurité pour permettre l'accès au personnel de service doivent être indiquées dans le manuel d'installation/d'entretien.
- Si des batteries doivent être installées par le personnel de service, des instructions pour les interconnexions, y compris le couple aux bornes, doivent être fournies.

 N'essayez pas de vous débarrasser des piles en les brûlant. Cela pourrait provoquer une explosion.

 Ne pas ouvrir ou détruire les piles. L'électrolyte qui s'échappe peut causer des blessures à la peau et aux yeux. Cela peut être toxique.

 Ne remplacez le fusible que par le même type et le même ampérage pour éviter les risques d'incendie.

 Ne démontez pas le système UPS.

 Cet équipement a été testé et déclaré conforme aux limites d'un appareil numérique de classe A, conformément à la partie 15 des règles de la FCC. Ces limites sont conçues pour fournir une protection raisonnable contre les interférences nuisibles lorsque l'équipement est utilisé dans un environnement commercial. Cet équipement génère, utilise et peut émettre de l'énergie radiofréquence et, s'il n'est pas installé et utilisé conformément au manuel d'instructions, peut causer des interférences nuisibles aux communications radio. L'utilisation de cet équipement dans une zone résidentielle est susceptible de provoquer des interférences nuisibles, auquel cas l'utilisateur devra corriger les interférences à ses propres frais.

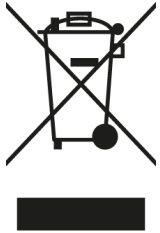


Les changements ou modifications non expressément approuvés par la partie responsable de la conformité pourraient annuler l'autorité de l'utilisateur à utiliser l'équipement.



Ceci est un produit pour les applications commerciales et industrielles. Dans les installations du deuxième environnement, des restrictions ou des mesures supplémentaires peuvent être nécessaires pour éviter les perturbations.

Directive sur les déchets d'équipements électriques et électroniques (WEEE)



Élimination correcte de ce produit: Ce symbole indique que ce produit ne doit pas être éliminé avec les ordures ménagères, conformément à la directive WEEE (2012/19/EU) et à votre législation nationale. Ce produit doit être déposé dans un centre de collecte agréé pour le recyclage des déchets d'équipements électriques et électroniques (EEE). La mauvaise manipulation de ce type de déchets pourrait avoir un impact négatif possible sur l'environnement et la santé humaine en raison de substances potentiellement dangereuses généralement associées aux EEE. Dans le même temps, votre coopération dans l'élimination correcte de ce produit contribuera à une utilisation efficace des ressources naturelles. Pour plus d'informations sur les lieux de recyclage de vos équipements usagés, veuillez contacter votre mairie ou votre service de collecte des ordures ménagères.

Supplied Components and Hardware

If any pieces are missing or damaged, please report it immediately to Technical Support at av.middleatlantic.techsupport@legrand.com or (866) 977-3901.



UPS RackLink™
Network Card
A



Cover
B



RJ45 to DB9 Cable
C



User Manual



NOTE

To order more hardware, contact support at av.middleatlantic.techsupport@legrand.com or (866) 977-3901.

Required Tools

- #2 Phillips Screwdriver



WARNING

AVERTISSEMENT

Use tools with caution and follow all necessary safety protocols.

Utiliser des outils avec prudence et suivre tous les protocoles de sécurité nécessaires.

Introduction

The RackLink™ Network Card (referred to as network card or card), provides network configuration interfaces for the NEXSYS Line Interactive UPS. While communicating with the UPS, the card acquires its information and provides remote workstation management over your network to conveniently obtain the status of your UPS and configure a variety of functions and settings. The card supports Public protocols including SNMP and HTTP.

Features

- Allows remote management of the UPS from any workstation through Internet or Intranet.
- Remote UPS monitoring via SNMP and HTTP.
- UPS and system function configuration from any client (password protected)
- Set UPS system parameters through a Web Browser.
- Collect event log and metering data history of power events, power quality, status, and battery conditions on your system.

Other features and supported protocols include:

- SNMP Trap and Email Notifications.
- Network Time Protocol.
- Telnet.
- BOOTP/DHCP.
- HTTPS, SSH, SFTP and SNMPv3 security protocols.
- RADIUS (Remote Authentication Dial In User Service) login and local authentication.
- Remote event log management through syslog
- IPv4
- IPv6 (Ready Logo Phase 2 - Core for Host, Logo ID 02-C-000624).



NOTE

Most images in this manual come from an Outlet model UPS. Procedures and images are similar for a Bank model UPS unless otherwise noted.



CAUTION

Disable the sleep mode function to keep your network card on regardless of your UPS power settings.

When enabled, sleep mode deactivates the network card port when the UPS is Off, the batteries are fully charged, and the LCD panel is asleep.

For more information, see "Understanding Network Access to Your UPS" on page [17](#).

Désactivez la fonction de mode veille pour garder votre carte réseau allumée quels que soient les paramètres d'alimentation de votre onduleur.

ATTENTION

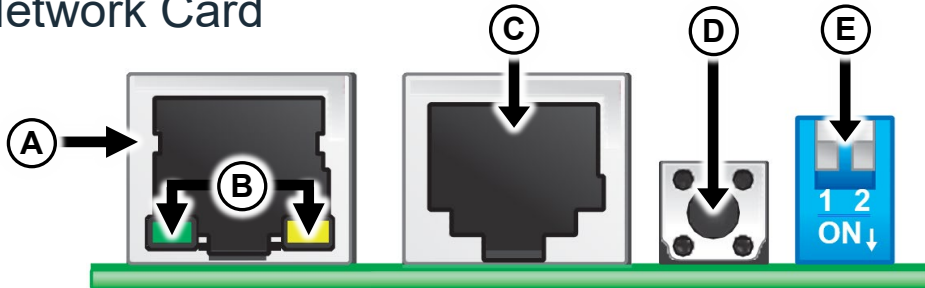
Lorsqu'il est activé, le mode veille désactive le port de la carte réseau lorsque l'onduleur est éteint, les batteries sont complètement chargées est en veille et l'écran LCD.

Pour plus d'informations, voir " Comprendre l'accès réseau à votre onduleur" à la page [17](#).

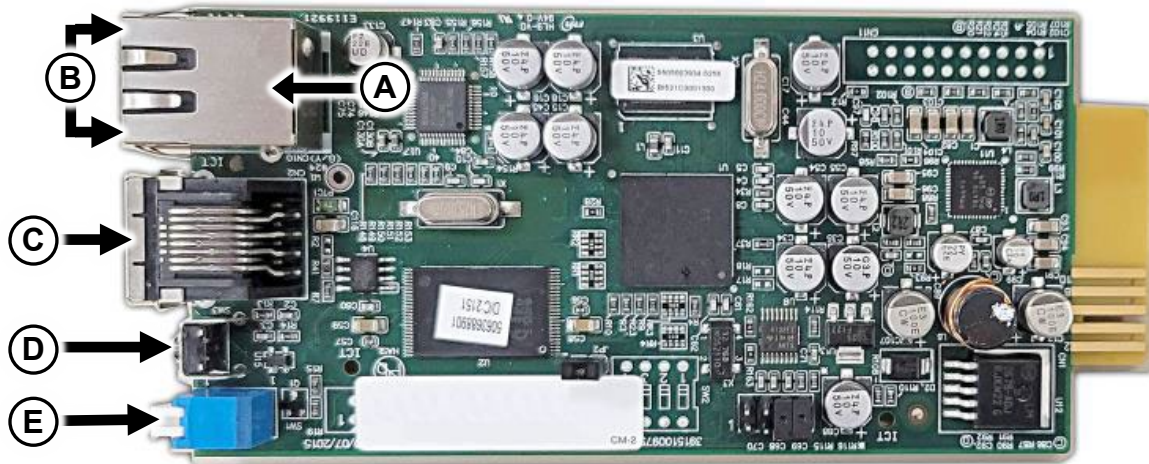
Feature Set

Lettered callouts on both the Top and Front of the following network card images (some letters are shown on both views) match with a corresponding list of explanations below.

Front of Network Card



Top of Network Card




A. Ethernet Network Port

B. Ethernet Port LED Indicators

When the Ethernet network port is initializing or upgrading the card's firmware, two LED indicators flash simultaneously and indicate the following statuses:

- Rapid simultaneous flashing (every 50ms): Initialization or firmware upgrade in progress.
- Slow simultaneous flashing (every 500ms): Initialization failed.

	CAUTION	When upgrading your firmware, never disconnect the Ethernet or power connections. Doing so may result in data loss or damage to the port. Lors de la mise à niveau de votre micrologiciel, ne déconnectez jamais les connexions Ethernet ou d'alimentation. Cela pourrait entraîner une perte de données ou endommager le port.
	ATTENTION	

The green LED indicator shows the following network connection statuses:

- ON: Network connection established and the IPv4 address is useable.
- OFF: Not connected to a network.

The yellow LED indicator shows the linking status between the SNMP IPv6, and your UPS as follows:

- Rapid flashing (every 50ms): UPS is linked.
- Slow flashing (every 500ms): UPS is not linked.

C. Console (COM) Port

D. Reset Button

When pressed, resets the SNMP card, and does not affect the operation of your UPS.

E. Operation Mode DIP Switches

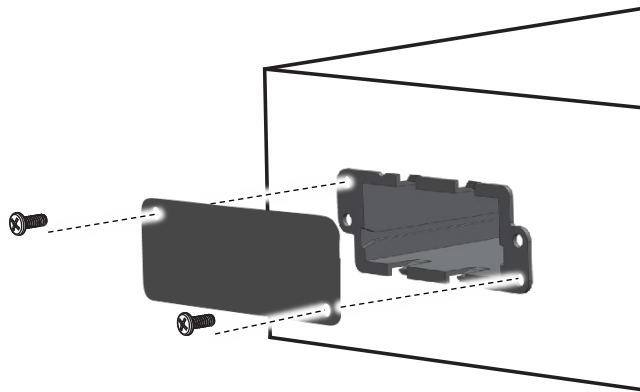


NOTE

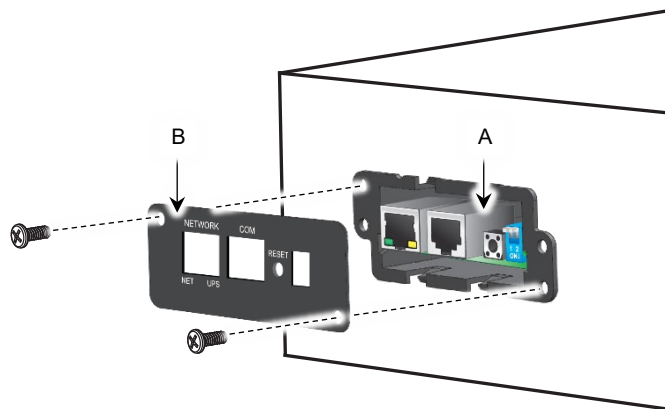
Leave both switches in the Normal Mode position (away from the numerals, as set from the factory).

Installing Your RackLink Network Card (If Applicable)

1. Use a #2 Phillips screwdriver to remove (2x) screws and the cover plate on the back of the UPS as shown.



2. Carefully insert the network card (A) in the upright position and firmly into place along the correct expansion slot grooves as shown.



3. Use screwdriver, (2x) cover screws, and attach cover (B) to the opening.

Understanding Network Card Configuration Methods

Disable the sleep mode function on your UPS. For more information, see “Understanding Network Access to Your UPS” on page 17.

If a network connection is available at your location, you can configure your network card using the web interface or command line interface (and using Telnet, HyperTerminal, or PuTTY).

For more information, see “Connecting to Your Network Card Using the Web Interface” on page 22 and “Connecting to Your Network Card Using a Virtual Terminal Client over a Network Connection” on page 28, respectively.

If a network connection is not available, you can configure your network card using the COM port.

For more information, see “Connecting to Your Network Card Using a Virtual Terminal Client over a COM Port Connection” on page 30.



NOTE

No matter which method is used, when you log in to the system for the first time you are forced to change the default passwords on all three accounts for security purposes. Be prepared to modify all three passwords.

Understanding Network Access to Your UPS



CAUTION

Disable the sleep mode function as shown in this topic to keep your network card on regardless of your UPS power settings.

When enabled, sleep mode deactivates the network card port when the UPS is Off, the batteries are fully charged, and the LCD panel is asleep.

Désactivez la fonction de mode veille comme indiqué dans cette rubrique pour que votre carte réseau reste allumée, quels que soient les paramètres d'alimentation de votre onduleur.

ATTENTION

Lorsqu'il est activé, le mode veille désactive le port de la carte réseau lorsque l'onduleur est éteint, les batteries sont complètement chargées est en veille et l'écran LCD.

1. Keep your UPS plugged in and with the unit turned Off, press the **Select** button to enter the Main Menu.
2. Use Up and Down buttons to scroll and highlight the Configuration main menu option, and then press **Select**.
3. Use Up and Down buttons to scroll and highlight the Service Mode configuration menu option, and then press **Select**.



NOTE

Service mode functions are password protected. The default password is 0000 and is automatically entered on the LCD. Press **Select** to verify each password character and enter the Service Mode menu.

4. Use Up and Down buttons to scroll and highlight the Sleep Mode service mode menu option, and then press **Select**.
5. Use Up and Down buttons to scroll and highlight the Disabled option, and then press **Select**.
6. Press the **Cancel** button to exit.

For more information, refer to "Using Main Menu > Configuration Functions > Service Mode" in the NEXSYS Line Interactive UPS User Manual (100-00072) at www.legrandav.com.

Understanding Default Administrative Account Setting

Your network card has the following default IP address, DHCP setting, and administrative account credentials:

Administrator
IP Address: 192 . 168 . 1 . 201
DHCP: Enabled
Username: admin
Password: admin

Locating the Card on Your Network Using DHCP and the Device Discovery Tool



NOTE

You can access and configure your network card with or without a network connection as explained in “Understanding Network Card Configuration Methods” on page [17](#).

No matter which method is used, when you log in to the system for the first time you are forced to change the default passwords on all three accounts for security purposes. Be prepared to modify all three passwords.

If desired, leave the default DHCP as enabled, connect your workstation to the network card Ethernet port using a straight through RJ45 Cat-6 Ethernet cable (not provided).

Then, you may access the web interface using the assigned IP address from the LCD menu or using the RackLink Device Discovery tool and change the device name or IP address as desired.

For more information, see “Installing The Device Discovery Software on a PC” on page 113 or “Installing The Device Discovery Software on a PC” on page 113.

Configuring a Workstation Static IP Connected Directly or via Switch

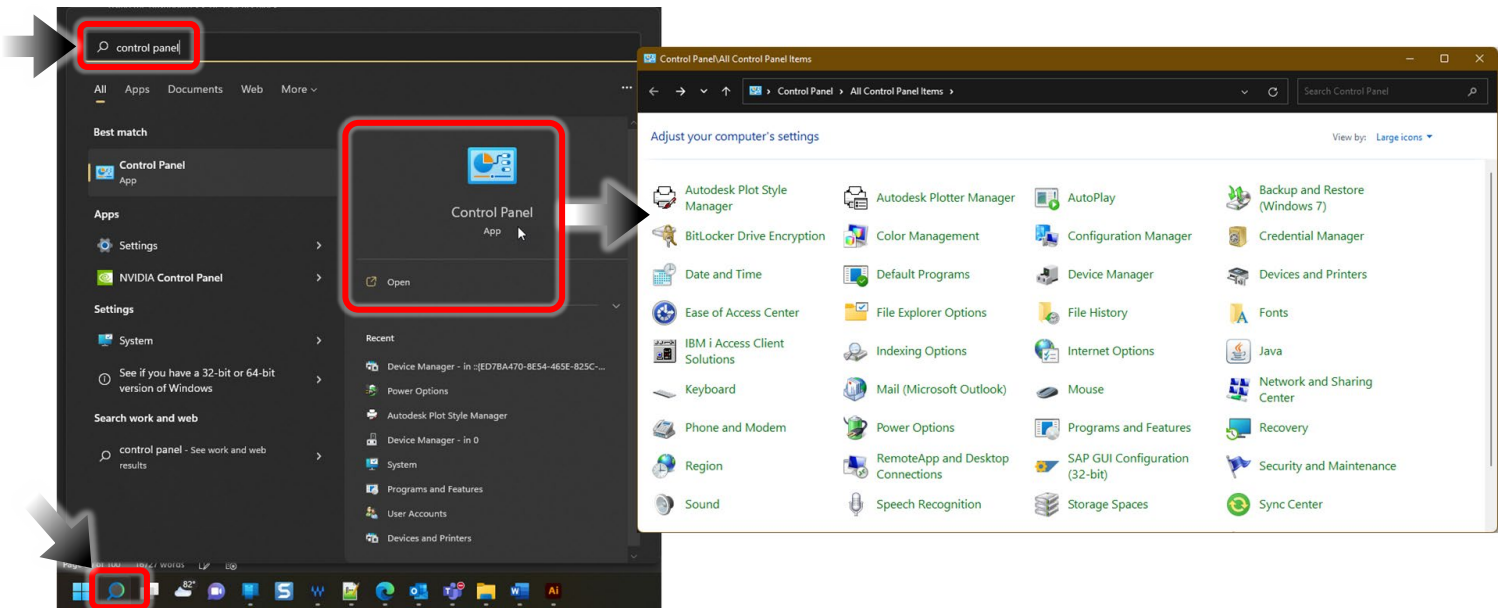
Out of the box, your RackLink device is configured to use DHCP. If you are using a DHCP server, your device should work automatically, and you can proceed to “Connecting to Your Network Card Using the Web Interface” on page [22](#). If you are not using a DHCP server, you can connect your workstation to the network card’s Ethernet port (or through a switch) using a straight through RJ45 Cat-6 Ethernet cable (not provided) and configure your workstation with a static IP address on the same network as follows.



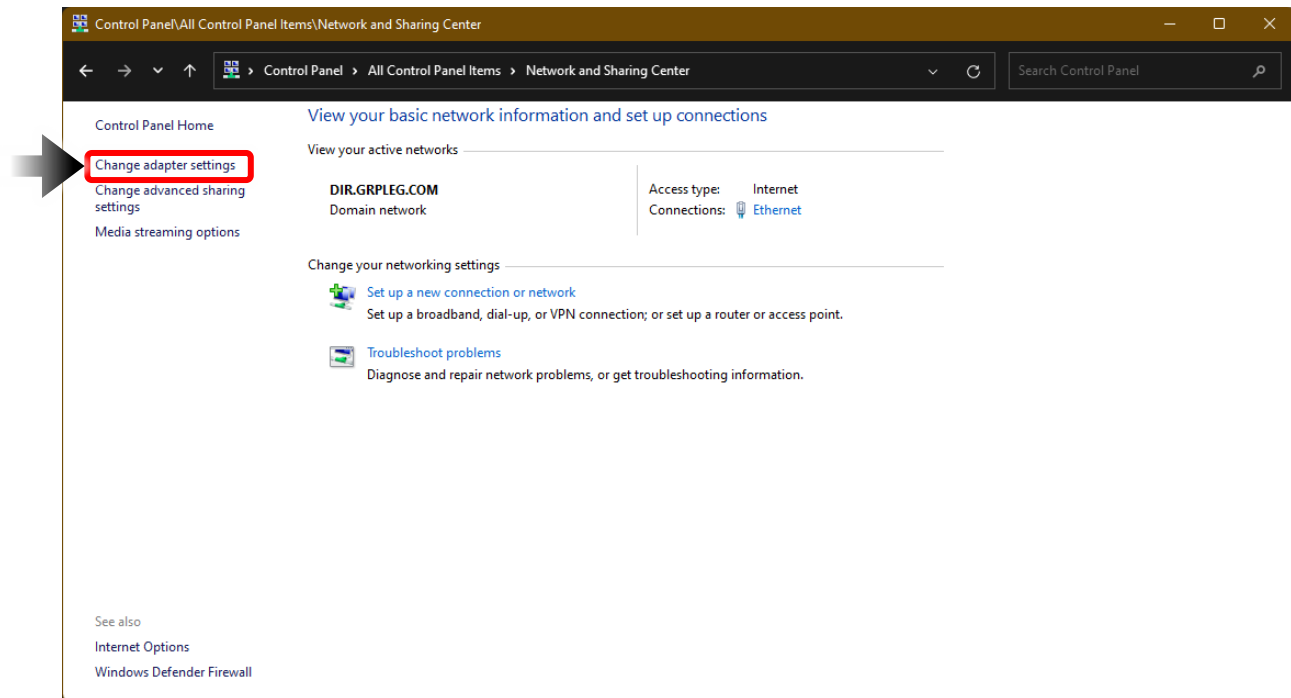
NOTE

The following procedure shows steps using Windows® 11. The steps are similar in other Windows operating systems. Refer to documentation provided with your workstation to access equivalent screens on other platforms.

1. Disconnect the workstation from any networks.
2. Use the Windows taskbar to search for and open the **Control Panel** as shown.

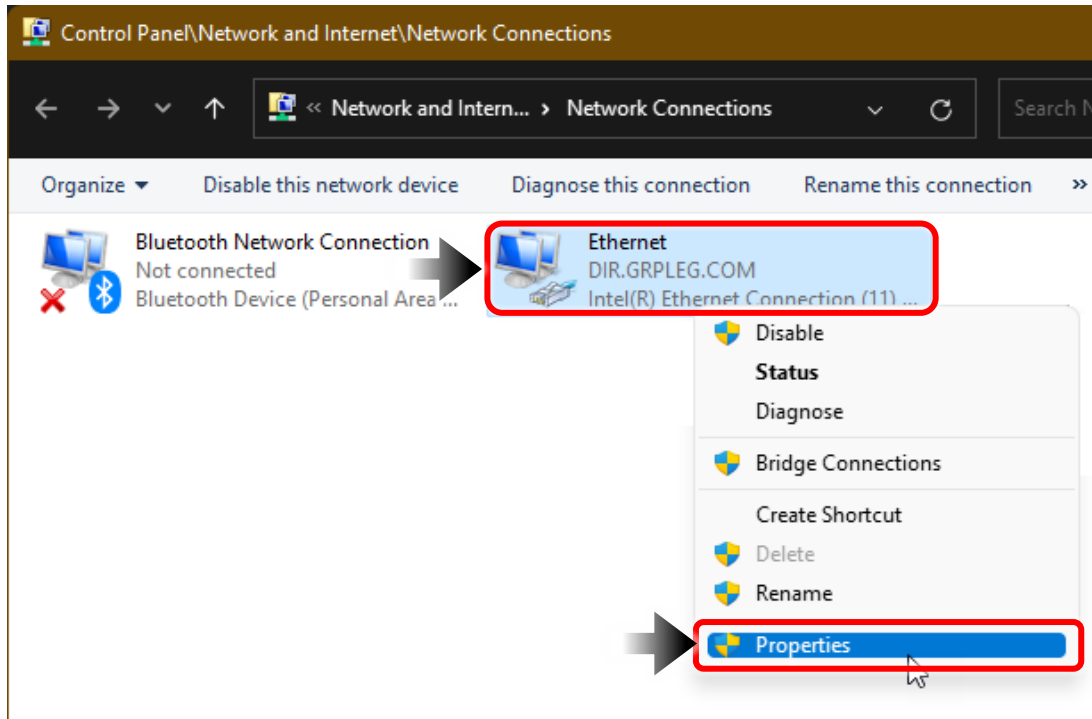


3. Double click Network Sharing Center in the Control Panel.
The Network Sharing Center screen appears.



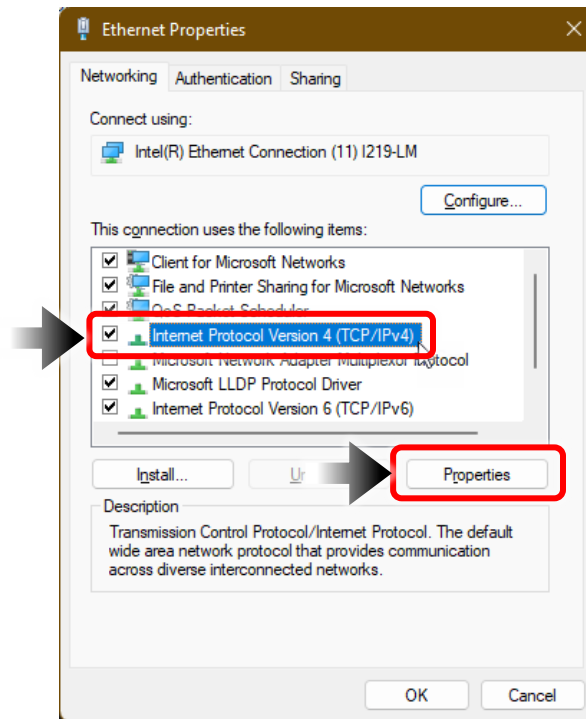
4. Click **Change adapter settings**.

The Network Settings screen appears.



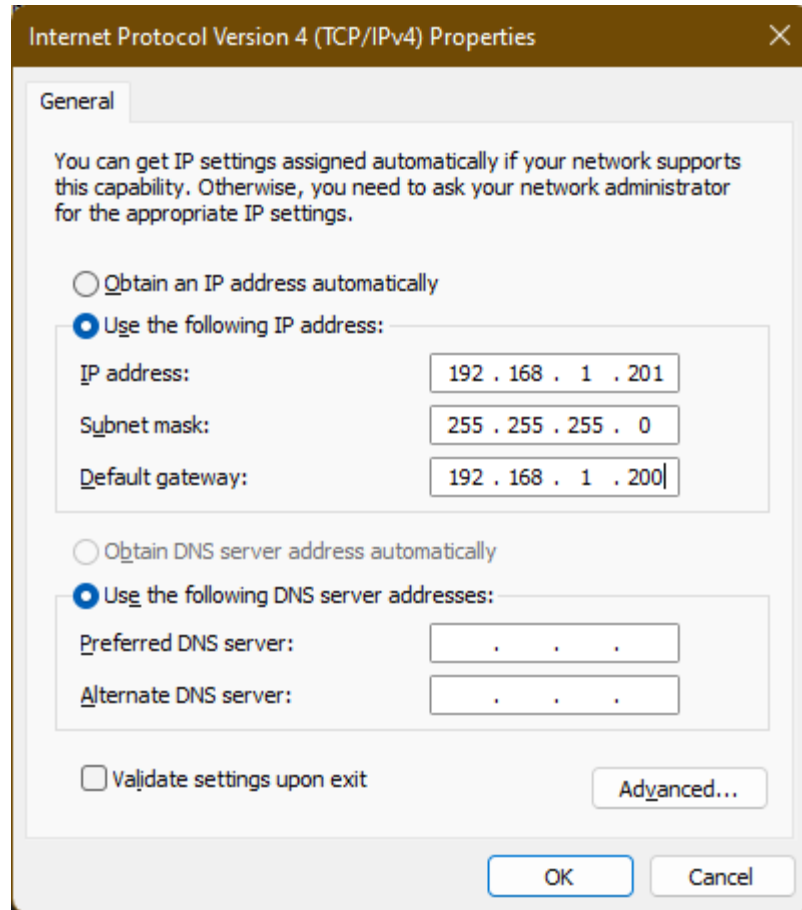
- 5. Locate the workstation’s wired network connection, which should be listed in the LAN or High-Speed Internet group and be named similar to “Ethernet” or “Local Area Connection.”
- 6. Right-click the wired network connection and select **Properties**.

The Local Area Connection Properties window appears.



7. Click **Internet Protocol Version 4 (TCP/IPv4)** to highlight the row.
8. Click **Properties**.

The Internet Protocol (IP) Properties screen appears.



9. Write down the workstation's current TCP/IP settings.



NOTE

Save these settings and use them to restore your workstation back to its original configuration after connecting to the device.

10. Select **Use the following TCP/IP address** radio button option and configure the following:
 - In the IP address field, enter **192 . 168 . 1 . 201**.
 - In the Subnet mask field, enter **255 . 255 . 255 . 0**.
 - In the Default gateway field, enter **192 . 168 . 1 . 200**.

11. Click **OK**.

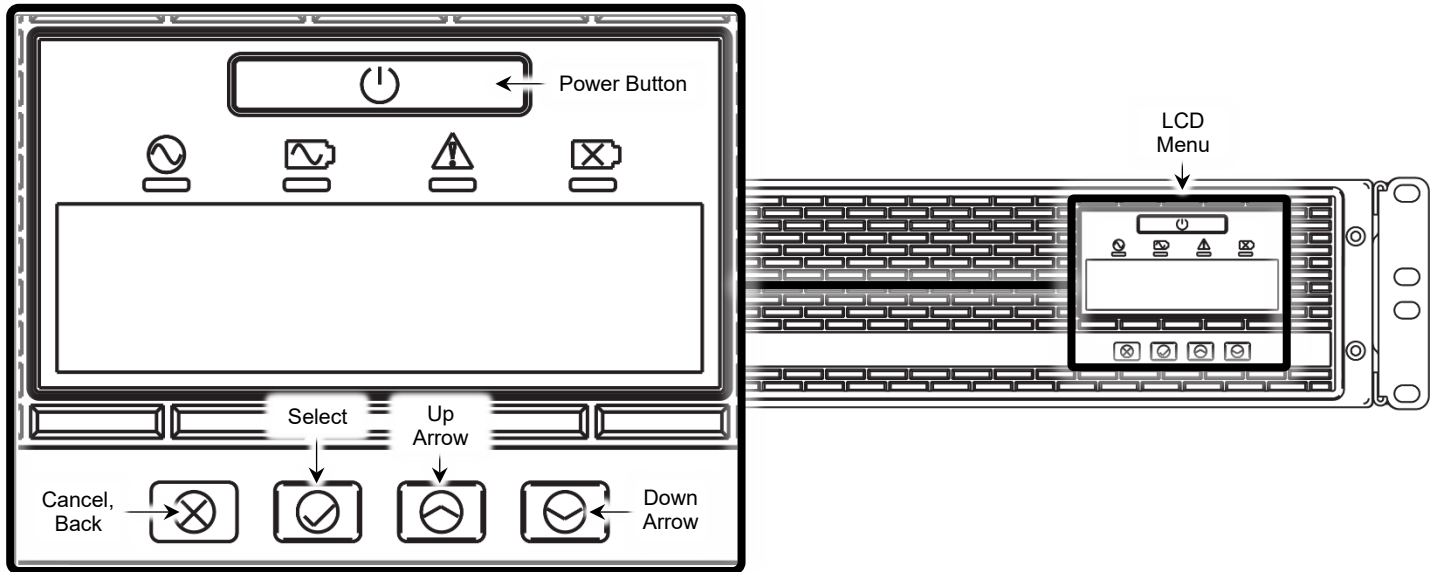


NOTE

You may need to reboot your workstation for the new settings to take effect.

Accessing Your IP Address on the LCD Menu

Use the following steps to view the IP address from the LCD display menu.



1. If you haven't done so already, your UPS must first be charged for at least eight hours before it can provide direct backup power to connected devices. For more information, refer to "Charging Your UPS, the First Time" in the NEXSYS Line Interactive UPS User Manual (100-00072) at www.legrandav.com.
2. Press the power button on the front panel and hold it until you hear a single beep, then release, to turn on your UPS.
For more information, refer to "Understanding the UPS Power Button" in the NEXSYS Line Interactive UPS User Manual (100-00072) at www.legrandav.com.
3. Press the **Select** button to enter the Main Menu.
4. Use Up and Down buttons to scroll and highlight the Information menu option and then press **Select**.
5. Use Up and Down buttons to scroll and highlight the IP Address menu option, and then press **Select**.
The IP address appears.
6. Write down the IP address for reference.


Connecting to Your Network Card Using the Web Interface

If a network connection is available at your location, you can use the following steps to sign in and perform some basic network card configurations using the web interface.

For more information about network card setup using the web interface, see "Configuring Your Network Card Using the Web Interface" on page [43](#).

1. Use a CAT5 network cable (not provided) to connect the network port on the card to the network at your location. Make sure your workstation is connected to the same LAN as your network card.

- Open a web browser and enter the default host name **UPS-RLINKCARD** or the default IP address **192.168.1.201**.



NOTE

- If you have previously changed the Host Name or IP address of your network card, connect with the new settings.
- Chrome is used as the web browser for the example shown in this topic. The procedures and images are similar if you use a different browser.


- Click **Advanced** and then **Proceed** to bypass the security certificate warning (since locally issued certificates are used at this point).



- The web interface login appears.
- Log into the web interface with the default credentials as username: **admin** | password: **admin**.

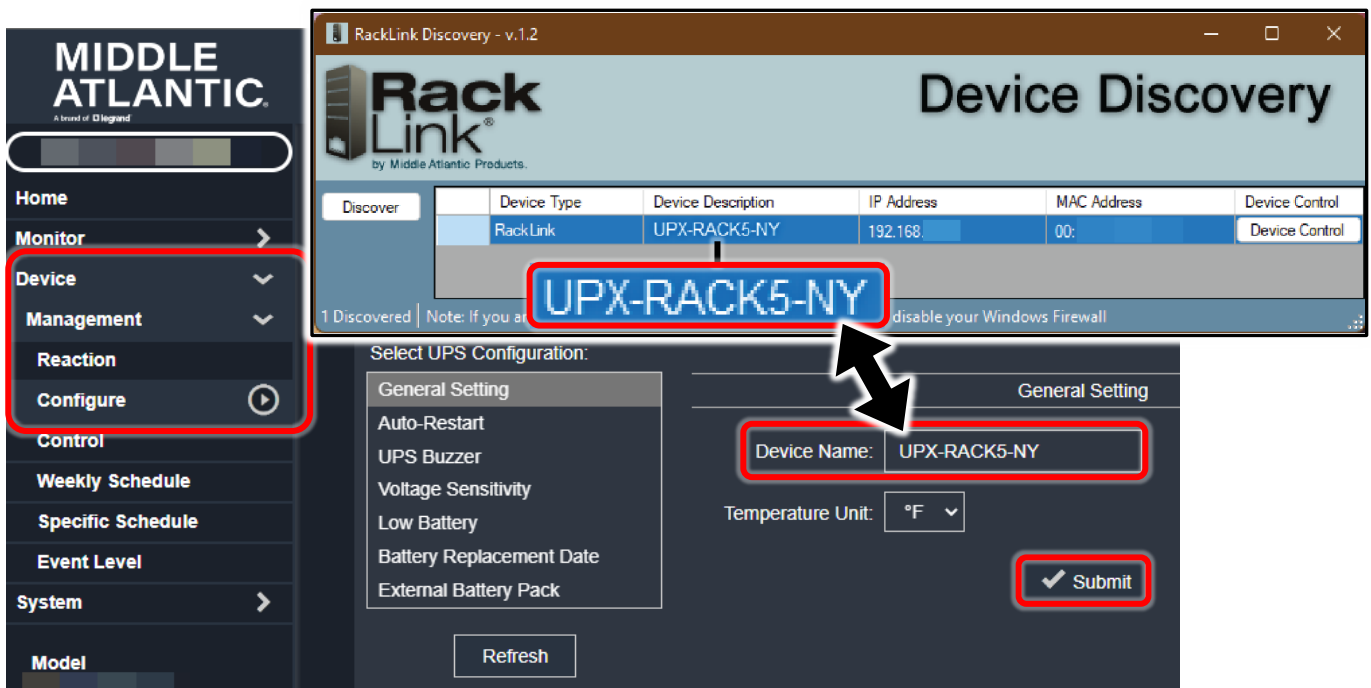
The default names and passwords for the Administrator, Device Manager, and Read Only User accounts in your web interface, respectively, are as follows:

Administrator	Device Manager	Read Only User
Username: admin	Username: admin	Username: admin
Password: admin	Password: password	Password: password


 **NOTE**

- If you are logging in for the first time, the Web Interface Utility makes you change the default passwords for all three accounts (for security purposes, you cannot use the defaults for this forced change) and makes you configure the system time settings. For more information, see “Using the Web Interface Setup Utility” on page 26.
- If you have previously changed the username and password for any of the accounts, log in with the new settings.
- The web interface terminates idle connections after 30 minutes.
- If you are still unable to connect to the web interface, see “Troubleshooting” on page 107.

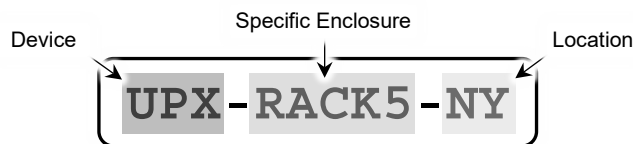
6. Click **Device >> Management >> Configure** to change the Device Name as desired.



7. Click **Submit**.

 **NOTE**

We recommend changing the device name on each unit to make them easier to identify when accessing units in-person or via remote. You can change the IP address, the device name, and many other settings using Ethernet connections (directly or through a switch) or remote connections. The following naming convention provides an example for easy identification by device, enclosure, and location.



8. Specify your preferred display language if different from the default (English). Your network card remembers your language preference.

9. Click **Submit**.
10. Click **System >> Administration >> User Manager** to manually specify whether users are allowed to log in from other LANs as follows:
 - Select **Only in This LAN** to block login attempts from external connections.
 - Select **Allow Any** to permit external connections.
11. Click **Submit**.
12. Click **System >> Administration >> TCP/IP** from the navigation menu and set the Host Name, IP address, Subnet Mask, and Gateway IP for your network card.



NOTE

If you have multiple UPS network cards installed on your network, we recommend changing the device name on each unit to make them easier to identify when accessing units in-person or via remote. You can change the IP address, the device name, and many other settings using Ethernet connections (directly or through a switch) or remote connections. The following naming convention provides an example for easy identification by device, enclosure, and location.

The screenshot shows the web interface for a Middle Atlantic UPS RackLink network card. The navigation menu on the left includes Home, Monitor, Device, System, Administration, User Manager, TCP/IP, Web, Console, FTP, Time Server, Syslog, Batch Configuration, Firmware Upgrade, Notification, Model, Firmware Version, and System Time. The main content area is titled "System » Administration » TCP/IP". It is divided into two main sections: "TCP/IP" and "System".

The "TCP/IP" section contains "TCP/IP Settings for IPv4" and "TCP/IP Settings for IPv6". In the IPv4 settings, the "DHCP Client" is set to "Disable" and the "IP Address" field is highlighted with a red box. The "System" section contains "System" and "Link" settings. In the "System" settings, the "Host Name" field is highlighted with a red box. A "Submit" button is located at the bottom right of the System settings.

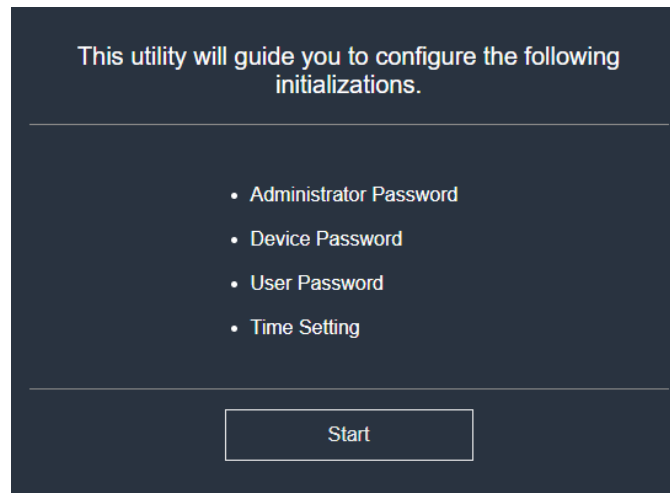
13. Click **Submit**.
14. Click **System >> Administration >> Time Server** from the navigation menu to manually set the date and time for the system or enable automatic time synchronization between the network card and the time servers.
15. Click **Submit**.
16. For more information about network card setup using the web interface, see “Configuring Your Network Card Using the Web Interface” on page [43](#).

Using the Web Interface Setup Utility

The first time you log into the web interface as described in “Connecting to Your Network Card Using the Web Interface” on page 22, the Web Interface Utility makes you change the default passwords for all three accounts (for security purposes, you cannot use the defaults for this forced change) and makes you configure the system time settings.

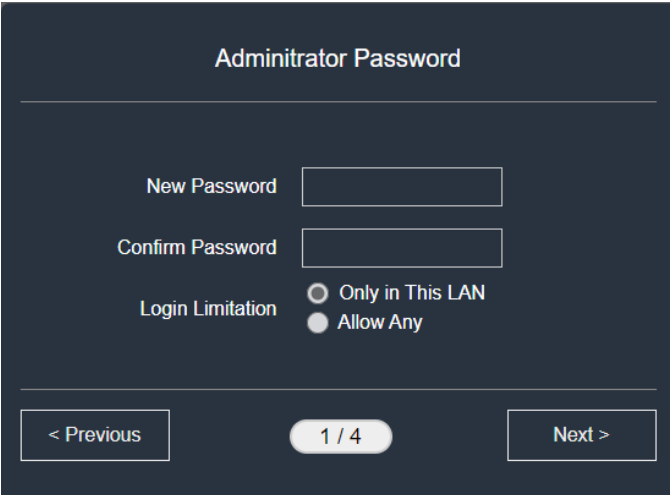
1. Log into the web interface with the default credentials as username: **admin** | password: **admin**. For more information, see “Connecting to Your Network Card Using the Web Interface” on page 22

The Web Interface Setup Utility appears.



2. Click **Start**.

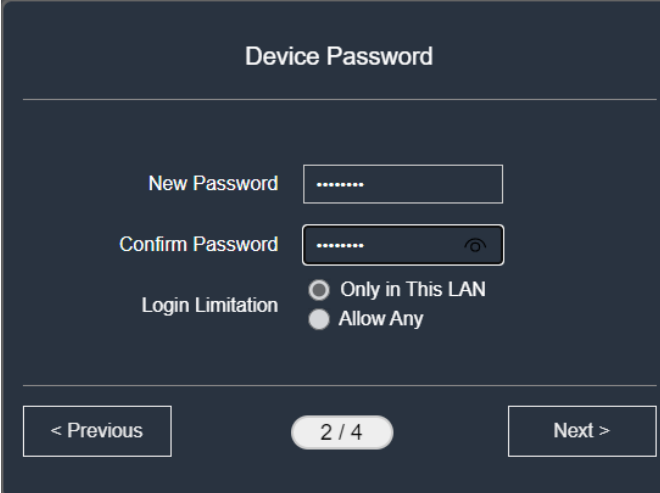
The utility prompts you for a new Administrator password and to set LAN limitations for the account.

A dark-themed screenshot of the "Adminitrator Password" configuration screen. It has two input fields: "New Password" and "Confirm Password". Below these is a "Login Limitation" section with two radio button options: "Only in This LAN" and "Allow Any". At the bottom, there are three buttons: "< Previous", "1 / 4", and "Next >".

3. Use fields for **New Password**, **Confirm Password**, and select a Login Limitation as **Only in This LAN** or **Allow Any**, as desired.

- Click **Next**.

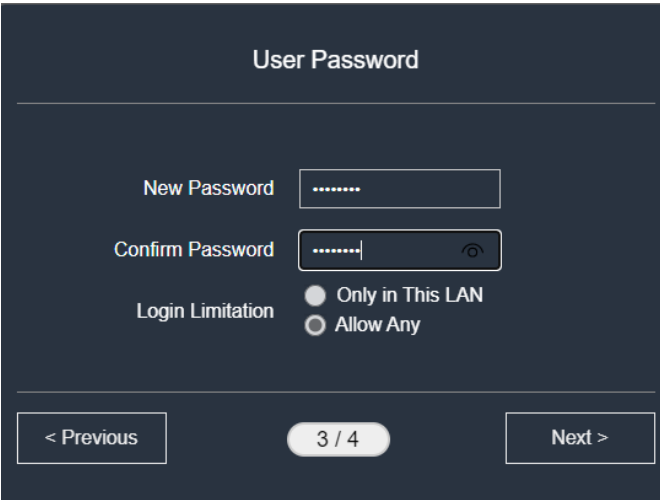
The utility prompts you for a new Device password and to set LAN limitations for the account.



The screenshot shows a dark-themed web interface titled "Device Password". It contains three input fields: "New Password" with a masked password field, "Confirm Password" with a masked password field and a toggle icon, and "Login Limitation" with two radio button options: "Only in This LAN" and "Allow Any". At the bottom, there are three buttons: "< Previous", "2 / 4", and "Next >".

- Use fields for **New Password**, **Confirm Password**, and select a Login Limitation as **Only in This LAN** or **Allow Any**, as desired.
- Click **Next**.

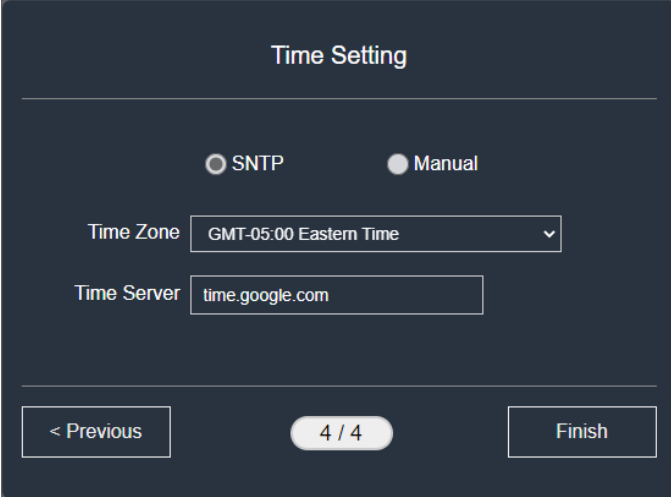
The utility prompts you for a new User password and to set LAN limitations for the account.



The screenshot shows a dark-themed web interface titled "User Password". It contains three input fields: "New Password" with a masked password field, "Confirm Password" with a masked password field and a toggle icon, and "Login Limitation" with two radio button options: "Only in This LAN" and "Allow Any". At the bottom, there are three buttons: "< Previous", "3 / 4", and "Next >".

- Use fields for **New Password**, **Confirm Password**, and select a Login Limitation as **Only in This LAN** or **Allow Any**, as desired.
- Click **Next**.

The utility prompts you for system time settings.

The screenshot shows a dark-themed window titled "Time Setting". At the top, there are two radio buttons: "SNTP" (which is selected) and "Manual". Below this, there is a "Time Zone" dropdown menu currently showing "GMT-05:00 Eastern Time". Underneath that is a "Time Server" text input field containing "time.google.com". At the bottom of the window, there are three buttons: "< Previous" on the left, "4 / 4" in the center, and "Finish" on the right.

9. Use fields to select SNTP or Manual as desired. For more information, see “Using the System >> Administration >> Time Server Page” on page [82](#).
10. Click **Finish**.

The dashboard appears.

Connecting to Your Network Card Using a Virtual Terminal Client over a Network Connection



NOTE

Microsoft® has removed HyperTerminal from Windows Vista and later versions. If your operating system does not include the program, a free alternative network virtual terminal client named PuTTY is available at <http://www.putty.org>.

If a network connection is available at your location, you can use the following steps to sign in and configure your network card via command line or using your preferred network virtual terminal client. Telnet™, HyperTerminal™, and PuTTY are mentioned and used as examples in this manual.

For more information about network card setup using a network virtual terminal client, see “Configuring Your Network Card Using a Virtual Terminal Client” on page [32](#).


1. Use a CAT5 network cable (not provided) to connect the network port on the card to the network at your location. Make sure your workstation is connected to the same LAN as your network card.
2. Launch your preferred network virtual terminal client – Telnet, HyperTerminal, and PuTTY are mentioned and used as examples in this manual. In your client software, look for connection settings (or something similar) where you can enter the host name or IP address values and connect to access the network card.

You may also prefer quickly launching and connecting to your network virtual terminal client using a command line.

- On Windows: Select **Start >> Run**, enter **cmd**, and press **Enter**.
- On Linux®: Launch Shell.

The following are example commands that launch the Telnet virtual terminal client and establishes a connection to the network card using the host name or IP address, respectively:

- **telnet UPS-RLNKCARD**
- **telnet 192.168.1.201**




NOTE

- If you have previously changed the Host Name or IP address of your network card, connect with the new settings.
- Refer to your network virtual terminal client documentation for more information about command line details, if available.

3. Log in with the default credentials as username: **admin** | password: **admin**.

The default names and passwords for the Administrator, Device Manager, and Read Only User accounts in your web interface, respectively, are as follows:

Administrator	Device Manager	Read Only User
Username: admin	Username: admin	Username: admin
Password: admin	Password: password	Password: password



NOTE

- If you are logging in for the first time, the system forces you to change the default passwords on all three accounts for security purposes.
- If you have previously changed the username and password for any of the accounts, log in with the new settings.
- If you are still unable to connect to the web interface, see “Troubleshooting” on page [107](#).
- The network card terminates idle network virtual terminal client connections after 60 seconds.

4. For more information about network card setup using a network virtual terminal client, see “Configuring Your Network Card Using a Virtual Terminal Client” on page [32](#).

Connecting to Your Network Card Using a Virtual Terminal Client over a COM Port Connection



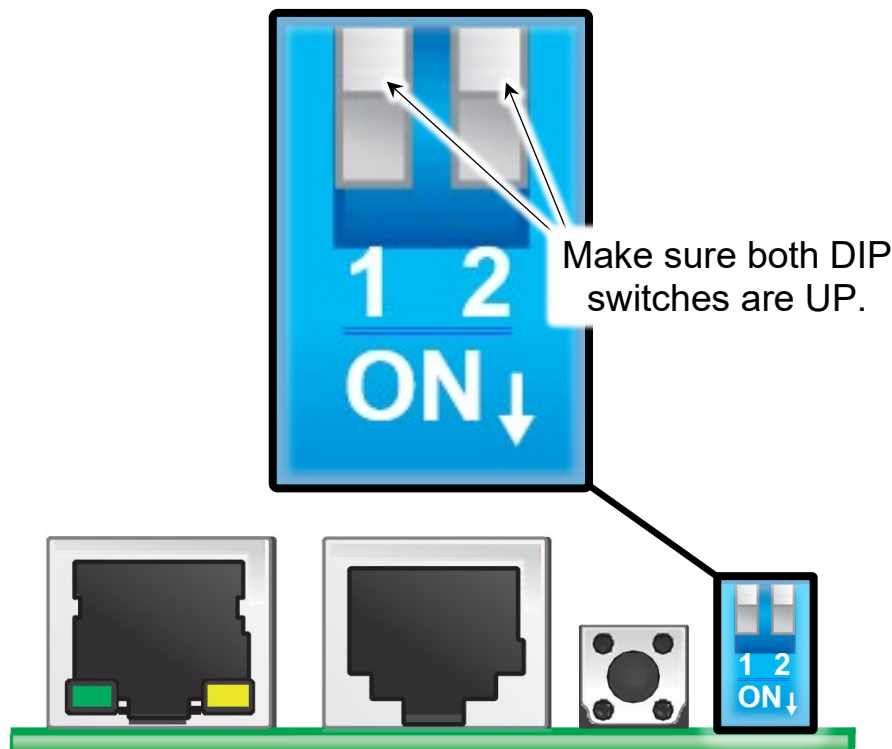
NOTE

- Microsoft has removed HyperTerminal from Windows Vista and later versions. If your operating system does not include the program, a free alternative network virtual terminal client named PuTTY is available at <http://www.putty.org>.
- If you are running a non-Windows system, refer to your system user manual for Telnet or other virtual terminal clients.


If a network connection is not available at your location, you can use the following steps to sign in and configure your network card using the COM port, and then use your preferred virtual terminal client. Telnet, HyperTerminal, and PuTTY are mentioned and used as examples in this manual.

For more information about network card setup using a virtual terminal client, see “Configuring Your Network Card Using a Virtual Terminal Client” on page 32.

1. Use the RJ45 to DB9 cable (C) to connect the COM port on the card to the COM port on your workstation.
2. Make sure the DIP switches on your network card are both UP (in the OFF position), which puts the card in normal mode.

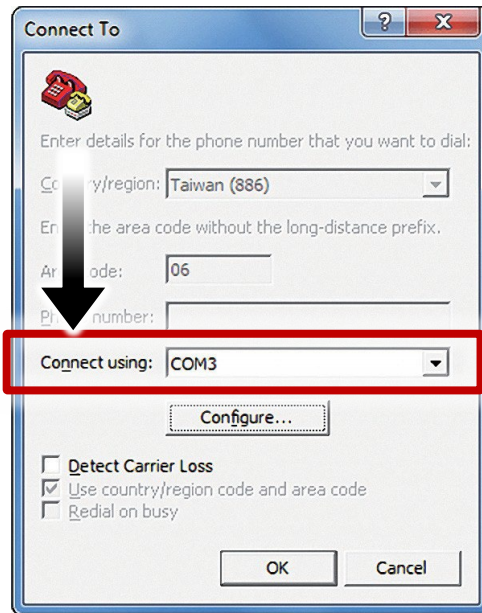


3. Launch your preferred virtual terminal client.

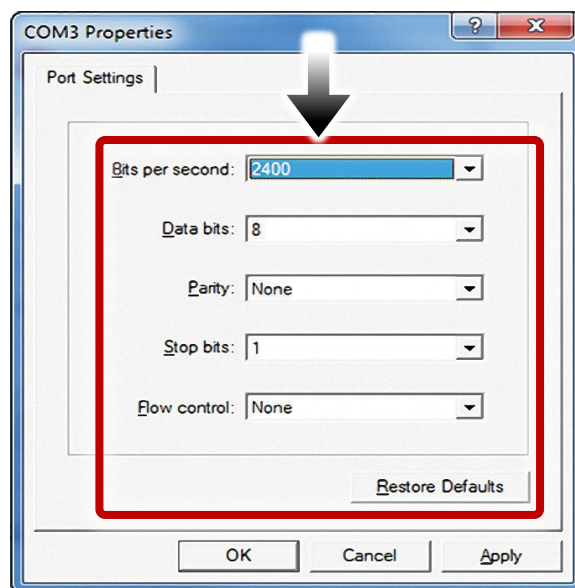
 **NOTE**

- HyperTerminal is shown as the example virtual terminal client in the remaining steps of this topic. HyperTerminal and PuTTY are also mentioned as example virtual terminal clients in this manual as well.
- Microsoft has removed HyperTerminal from Windows Vista and later versions. If your operating system does not include the program, a free alternative virtual terminal client named PuTTY is available at <http://www.putty.org>.

4. Enter a name, choose an icon for the connection, and click **OK**.
5. Select the COM port connected to the network card from the Connect Using drop-down,

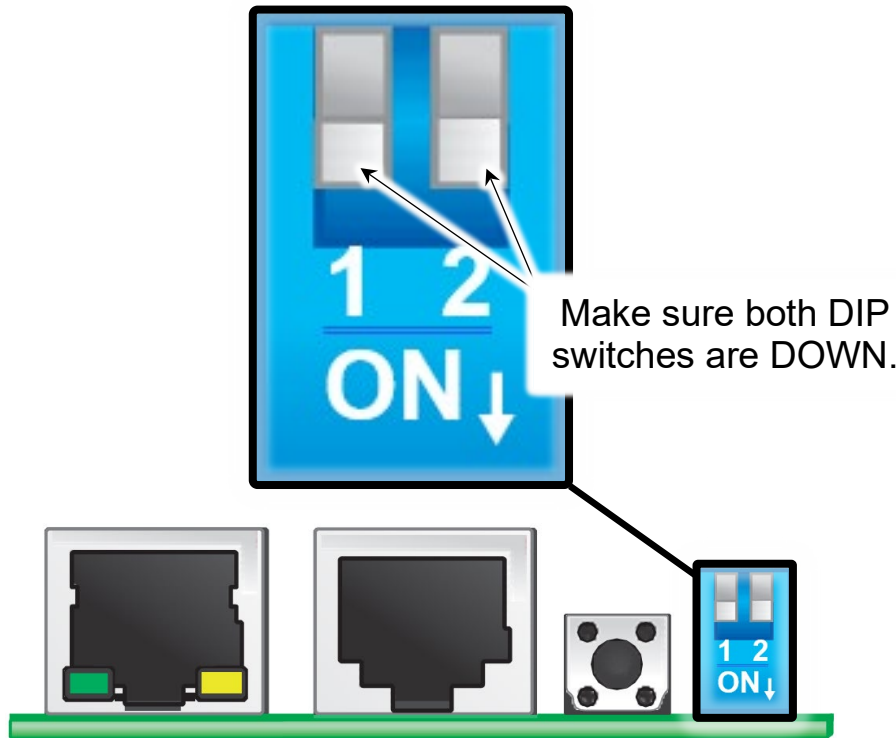


6. Click **Configure** and set up the COM port parameters as shown.



7. Click **Apply** and **OK** to continue.
8. Make sure the DIP switches on your network card are both DOWN (in the ON position), which puts the card in configuration mode.

Your virtual terminal client should then automatically connect to your network card. You may have to click a telephone icon or a connect button in your client to force the connection.



NOTE

- The network card terminates idle virtual terminal client connections after 60 seconds.
- When you are finished making configurations, return both DIP switches on the network card to the UP (OFF position) which puts the card back into normal mode.

9. For more information about network card setup using a virtual terminal client, see “Configuring Your Network Card Using a Virtual Terminal Client” on page [32](#).

Configuring Your Network Card Using a Virtual Terminal Client



NOTE

Microsoft has removed HyperTerminal from Windows Vista and later versions. If your operating system does not include the program, a free alternative virtual terminal client named PuTTY is available at <http://www.putty.org>.

1. Use a virtual terminal client to configure your network card over a network or COM port connection.

For more information about connecting to your network card either of these ways, see “Connecting to Your Network Card Using a Virtual Terminal Client over a Network Connection” on page 26 and “Connecting to Your Network Card Using a Virtual Terminal Client over a COM Port Connection” on page 30.

**NOTE**

If using a COM port connection, make sure the DIP switches on your network card are both DOWN (in the ON position), which puts the card in configuration mode.

The Main Menu appears.

```
+=====+
|  Web Card Main Menu  |
+=====+
Web Card Version 1.10.00
MAC Address 00-30-ab-2a-bd-99
[1].User Manager
[2].TCP/IP Setting
[3].Network Parameter
[4].Time Server
[5].Soft Restart
[6].Reset All To Default
[z].Exit Without Save
[0].Save And Exit

Please Enter Your Choice => █
```

2. Select one of the Main Menu items shown by entering the corresponding number (or letter) and pressing **Enter**.
3. Use the remaining topics in this section to access and configure various settings included in the Main Menu.

Using the User Manager Menu

```

+=====+
|   Web Card Main Menu   |
+=====+
Web Card Version 1.10.00
MAC Address 00-30-ab-2a-bd-99
[1].User Manager
[2].TCP/IP Setting
[3].Network Parameter
[4].Time Server
[5].Soft Restart
[6].Reset All To Default
[z].Exit Without Save
[0].Save And Exit

Please Enter Your Choice => █

```

- Type **1** and press **Enter** to select User Manager from the Main Menu.

Use the corresponding list in this topic to access and configure various settings in the User Manager menu.

```

+=====+
|   User Manager   |
+=====+
RADIUS
[1].RADIUS Auth:Disable
[2].Server:
[3].Secret:
[4].Port:      1812
-----
Local Auth
  Administrator
[5].Account:   admin
[6].Password:  *****
[7].Limitation: Allow Any
  Device Manager
[8].Account:   device
[9].Password:  *****
[a].Limitation: Allow Any
  Read Only User
[b].Account:   user
[c].Password:  *****
[d].Limitation: Allow Any
[0].Back To Previous Menu

Please Enter Your Choice => █

```

RADIUS Settings

1. **RADIUS Auth:** Select to specify whether a RADIUS login is allowed. RADIUS is disabled by default.
2. **Server:** If RADIUS is Enabled, select to provide the server's name.
3. **Secret:** If RADIUS is Enabled, select to provide the secret name.
4. **Port:** If RADIUS is Enabled, select to specify the port number. The default port number is 1812.

Local Auth Settings

Administrator

5. **Administrator Account:** The case sensitive administrator account name. The default name is admin.
6. **Administrator Password:** The case sensitive password for the administrator account. The default is password.
7. **Administrator Limitation:** Select if you want the administrator account given access Only in This LAN or outside of the LAN, as desired. The default setting is Only in This LAN.

Device Manager Account

8. **Device Manager Account:** The case sensitive device manager account name. The default name is device.
9. **Device Manager Password:** The case sensitive password for the device manager account. The default is password.
- a. **Device Manager Limitation:** Select if you want the device manager account given access Only in This LAN or outside of the LAN, as desired. The default setting is Only in This LAN.

Read Only User Account

- b. **Read Only User Account:** The case sensitive read only user account name. The default name is admin.
- c. **Read Only User Password:** The case sensitive password for the read only user account. The default is password.
- d. **Read Only User Limitation:** Select if you want the read only user account given access Only in This LAN or outside of the LAN, as desired. The default setting is Only in This LAN.
0. Back To Previous Menu

TCP/IP Settings


NOTE

If you have multiple UPS network cards installed on your network, you can avoid issues by changing the default Host Name, disabling BOOTP/DHCP, and manually assigning a static IP address on each card.

```

+=====+
|   Web Card Main Menu   |
+=====+
Web Card Version 1.10.00
MAC Address 00-30-ab-2a-bd-99
[1].User Manager
[2].TCP/IP Setting
[3].Network Parameter
[4].Time Server
[5].Soft Restart
[6].Reset All To Default
[z].Exit Without Save
[0].Save And Exit

Please Enter Your Choice => █

```

- Type **2** and press **Enter** to select TCP/UP Setting from the Main Menu.

Use the corresponding list in this topic to access and configure various settings in the TCP/IP Setting menu.

```

+=====+
|   TCP/IP Setting   |
+=====+
[1].IPv4 Address:      192.168.1.201
[2].IPv4 Subnet Mask:  255.255.255.0
[3].IPv4 Gateway IP:  10.144.7.254
[4].IPv4 DNS or WINS IP:10.141.156.1
[5].DHCPv4 Client:    Enable
[6].IPv6 Address:     fe80::230:abff:fe2a:bd99
[7].IPv6 Prefix Length: 64
[8].IPv6 Gateway IP:  fe80::f6f2:6dff:fe87:bb93
[9].IPv6 DNS IP:      ::
[a].DHCPv6:           Enable
[b].Host Name (NetBIOS): UPS-RLINKCARD
[c].System Contact:
[d].System Location:
[e].Auto-Negotiation: Enable
[f].Speed:            100M
[g].Duplex:           Full
[h].Status Stable:    3
[i].Telnet Idle Time: 60 Seconds
[0].Back To Previous Menu

Please Enter Your Choice => █

```


1. **IPv4 Address:** Select to specify the IPv4 address. The default address is 192.168.001.201.
2. **IPv4 Subnet Mask:** Select to specify the IPv4 subnet mask. The default mask is 255.255.255.000.
3. **IPv4 Gateway IP:** Select to specify the IPv4 gateway IP address. The default address is 192.168.001.254.
4. **IPv4 DNS or WINS IP:** Select to specify either the IPv4 domain name server or WINS IP address. The default address is 192.168.001.001.
5. **DHCPv4 Client:** Select to enable or disable the DHCPv4 protocol. The default setting is Enable.
6. **IPv6 Address:** Select to specify the IPv6 address.
7. **IPv6 Prefix Length:** Select to specify the IPv6 prefix length.
8. **IPv6 Gateway IP:** Select to specify the IPv6 gateway IP address.
9. **IPv6 DNS IP:** Select to specify the IPv6 Domain Name Server IP address.
 - a. **DHCPv6:** Select to enable or disable the DHCPv6 protocol. The default setting is Enable.
 - b. **Host Name (NetBIOS):** Select to specify the host name for your UPS RackLink network card. The default name is UPS-RLINKCARD.
 - c. **System Contact:** Select to specify the system contact information.
 - d. **System Location:** Select to specify the system location information.
 - e. **Auto-Negotiation:** Select to enable or disable the automatic transfer rate (10/100Mbps) negotiation. The default setting is Enable.
 - f. **Speed:** If Auto-Negotiation is disabled, select to specify the transfer rate. The default speed is 100M.
 - g. **Duplex:** If Auto-Negotiation is disabled, select to specify the duplex mode. The default mode is Full.
 - h. **Status Stable:** Select to specify the number of times the system acquires stable readings before the status of the UPS and the network card are considered synchronized. This status is used to prevent fluctuating readings. The default number the system checks for synchronization is 3.
 - i. **Telnet Idle Time:** Select to specify the time out setting for virtual terminal client connections. The default time out span is 60 Seconds.
0. Back To Previous Menu

Network Parameter

```
+=====+
|  Web Card Main Menu  |
+=====+
Web Card Version 1.10.00
MAC Address 00-30-ab-2a-bd-99
[1].User Manager
[2].TCP/IP Setting
[3].Network Parameter
[4].Time Server
[5].Soft Restart
[6].Reset All To Default
[z].Exit Without Save
[0].Save And Exit

Please Enter Your Choice => █
```

- Type **3** and press **Enter** to select Network Parameter from the Main Menu.

Use the corresponding list in this topic to access and configure various settings in the Network Parameter menu.

```
+=====+
|  Network Parameter  |
+=====+
[1].HTTP Server:      Enable
[2].HTTPS Server:     Enable
[3].Telnet Server:    Disable
[4].SSH/SFTP Server:  Enable
[5].FTP Server:       Disable
[6].Syslog:           Disable
[7].HTTP Server Port: 80
[8].HTTPS Server Port: 443
[9].Telnet Server Port: 23
[a].SSH Server Port:  22
[b].FTP Server Port:  21
[c].Syslog Server1:
[d].Syslog Server2:
[e].Syslog Server3:
[f].Syslog Server4:
[g].SNMP Get,Set Port: 161
[h].ModbusTCP Server:  Disable
[i].ModbusTCP Slave ID: 1
[j].ModbusTCP Port:   502
[0].Back To Previous Menu

Please Enter Your Choice => █
```

1. **HTTP Server:** Select to enable or disable HTTP. The default setting is Enable.
2. **HTTPS Server:** Select to enable or disable the HTTPS. The default setting is Enable.

3. **Telnet Server:** Select to enable or disable the Telnet protocol. The default setting is Enable.
4. **SSH/SFTP:** Select to enable or disable the SSH/SFTP protocol. The default setting is Enable.
5. **FTP Server:** Select to enable or disable the FTP protocol. The default setting is Disable.
6. **Syslog:** Select to enable or disable remote Syslog. The default setting is Disable.
7. **HTTP Server Port:** Select to specify the HTTP port number. The default port number is 80.
8. **HTTPS Server Port:** Select to specify the HTTPS port number. The default port number is 443.
9. **Telnet Server Port:** Select to specify the Telnet port number. The default port number is 23.
 - a. **SSH Server Port:** Select to specify the SSH port number. The default port number is 22.
 - b. **FTP Server Port:** Select to specify the FTP port number. The default port number is 21.
 - c. **Syslog Server 1:** Select to modify the host name of remote Syslog Server 1.
 - d. **Syslog Server 2:** Select to modify the host name of remote Syslog Server 2.
 - e. **Syslog Server 3:** Select to modify the host name of remote Syslog Server 3.
 - f. **Syslog Server 4:** Select to modify the host name of remote Syslog Server 4.
 - g. **SNMP Get, Set Port:** Select to specify the SNMP port number. The default port number is 161.
 - h. **ModbusTCP Server:** Select to enable or disable the ModbusTCP server. The default setting is Disable.
 - i. **ModbusTCP Slave ID:** Select to specify the ModbusTCP slave ID. The default setting is 1.
 - j. **ModbusTCP Port:** Select to specify the ModbusTCP port number. The default port number is 502.
0. Back To Previous Menu

Time Server



NOTE

Your network card allows you to either manually adjust the date and time or set up an automatic time server synchronization.

To configure a time server service on your workstation, see “Troubleshooting” on page [107](#).

```

+=====+
|  Web Card Main Menu  |
+=====+
Web Card Version 1.10.00
MAC Address 00-30-ab-2a-bd-99
[1].User Manager
[2].TCP/IP Setting
[3].Network Parameter
[4].Time Server
[5].Soft Restart
[6].Reset All To Default
[z].Exit Without Save
[0].Save And Exit

Please Enter Your Choice => █

```

- Type **4** and press **Enter** to select Time Server from the Main Menu.

Use the corresponding list in this topic to access and configure various settings in the Time Server menu.

```
+=====+
|      Time Server      |
+=====+
[1].Time Selection:      SNTP
[2].Time Zone:          -5 hr
[3].1st Time Server:    time.google.com
[4].2nd Time Server:
[5].Manual Date:        01/01/2000 (MM/DD/YYYY)
[6].Manual Time:        00:00:00 (hh:mm:ss)
[0].Back To Previous Menu

Please Enter Your Choice => █
```

1. **Time Selection:** Select SNTP or manual. The default is SNTP.

**NOTE**

Select SNTP to configure menu items 2 - 4. Or select manual to configure menu items 5 and 6.

2. **Time Zone:** If using SNTP, select to specify your time zone. The default is GMT – 5 Eastern Standard Time (EST).
3. **1st Time Server:** If using SNTP, select to specify the first-time server for SNTP. The default is time.google.com.
4. **2nd Time Server:** If using SNTP, select to specify a second time server for SNTP, if desired.
5. **Manual Date:** If using manual configuration, select to specify the date manually. The default date is 01/01/2000.
6. **Manual Time:** If using manual configuration, select to specify the time manually. The default time is 00:00:00.

Soft Restart

```
+=====+
|  Web Card Main Menu  |
+=====+
Web Card Version 1.10.00
MAC Address 00-30-ab-2a-bd-99
[1].User Manager
[2].TCP/IP Setting
[3].Network Parameter
[4].Time Server
[5].Soft Restart
[6].Reset All To Default
[z].Exit Without Save
[0].Save And Exit

Please Enter Your Choice => █
```

- Type **5** and press **Enter** to select Soft Restart from the Main Menu.
This restarts the network card and does not affect any UPS operation.

Default Reset

```
+=====+
|  Web Card Main Menu  |
+=====+
Web Card Version 1.10.00
MAC Address 00-30-ab-2a-bd-99
[1].User Manager
[2].TCP/IP Setting
[3].Network Parameter
[4].Time Server
[5].Soft Restart
[6].Reset All To Default
[z].Exit Without Save
[0].Save And Exit

Please Enter Your Choice => █
```

- Type **6** and press **Enter** to select Reset All To Default from the Main Menu.
This resets all your network card settings to the factory defaults.

Exit Without Saving

```
+=====+
|  Web Card Main Menu  |
+=====+
Web Card Version 1.10.00
MAC Address 00-30-ab-2a-bd-99
[1].User Manager
[2].TCP/IP Setting
[3].Network Parameter
[4].Time Server
[5].Soft Restart
[6].Reset All To Default
[z].Exit Without Save
[0].Save And Exit

Please Enter Your Choice => █
```

- Type **z** and press **Enter** to select Exit Without Save from the Main Menu.

This exits the main menu (and terminates the network card connection from your virtual terminal client) without saving any of your changes.

Save and Exit

```
+=====+
|  Web Card Main Menu  |
+=====+
Web Card Version 1.10.00
MAC Address 00-30-ab-2a-bd-99
[1].User Manager
[2].TCP/IP Setting
[3].Network Parameter
[4].Time Server
[5].Soft Restart
[6].Reset All To Default
[z].Exit Without Save
[0].Save And Exit

Please Enter Your Choice => █
```

- Type **0** and press **Enter** to select Save And Exit from the Main Menu.

This exits the main menu (and terminates the network card connection from your virtual terminal client) while saving your changes.

Configuring Your Network Card Using the Web Interface

This section of the manual shows you how to configure your network card using the web interface.

- Connect your network card to your LAN and sign into the web interface. For more information, see “Connecting to Your Network Card Using the Web Interface” on page [22](#).




NOTE

- If you have previously changed the Host Name or IP address of your network card, connect with the new settings.
- If you have previously changed the username and password for any of the accounts, log in with the new settings.
- If you made configurations to your network card using a virtual terminal client over a COM port connection, remember to return both DIP switches on the network card to the UP (OFF position), which puts the card back into normal mode before using the web interface.
- Different screens and functions are shown based on the account used when signing into the web interface.
- Microsoft Edge is used as the web browser for the example shown in this topic. The procedures and images are similar if you use a different browser.

- The web interface is divided into Dashboard, Monitor, Device, and System areas. The following topics provide more detail about each area.

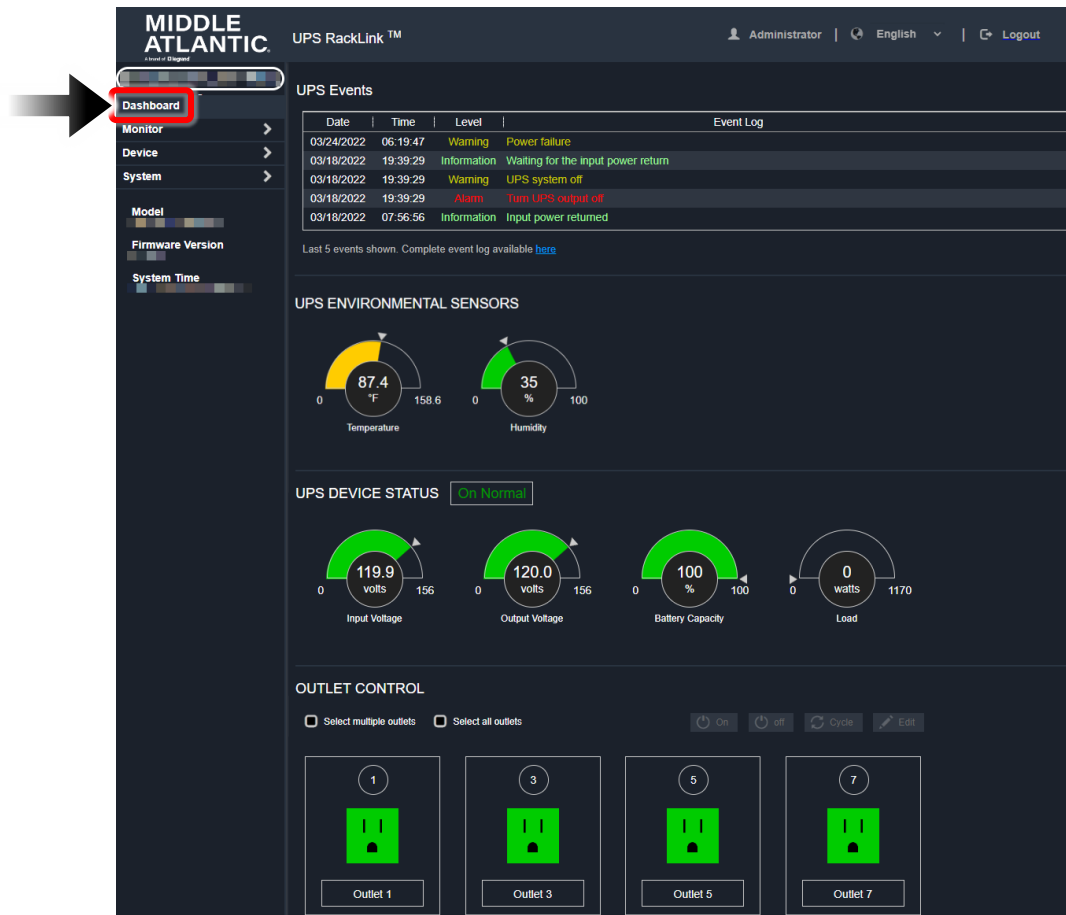
Using the Dashboard


- Click **Dashboard** on the navigation menu.



NOTE Most images in this manual come from an Outlet model UPS. Procedures and images are similar for a Bank model UPS unless otherwise noted.

The Dashboard page appears and contains information about the UPS Events, UPS Environmental Sensors, UPS Device Status, and Outlet Control on corresponding sections of the screen. On the Dashboard, these sections are referred to as blocks.





TIP Double click the top title area of UPS Events, UPS Environmental Sensors, UPS Device Status, and Outlet Control blocks to hide or show each dashboard section, as desired.



Using the Dashboard >> UPS Events Block

This block shows the last 5 events. Click the link shown for the complete list of event logs on the **Monitor >> History >> Event Log** page.

For more information, see “Using the Monitor >> History >> Event Log Page” on page 53.

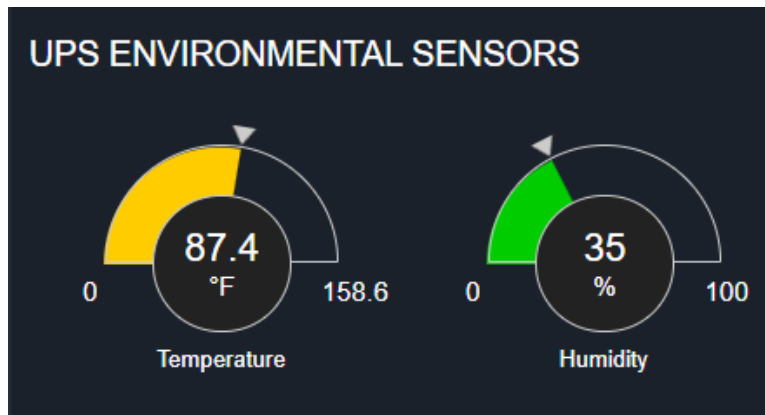
UPS Events

Date	Time	Level	Event Log
11/12/2021	08:58:02	System	admin login to the WEB from 10.144.7.27
11/11/2021	17:17:13	System	admin login to the WEB from 10.144.7.27
11/11/2021	17:15:23	Warning	Login Failed, Account: admin, IP: 10.144.7.27
11/11/2021	17:14:45	Warning	Login Failed, Account: admin, IP: 10.144.7.27
11/11/2021	17:13:40	Warning	Login Failed, Account: device, IP: 10.144.7.27

Last 5 events shown. Complete event log available [here](#)

Using the Dashboard >> UPS Environmental Sensors Block

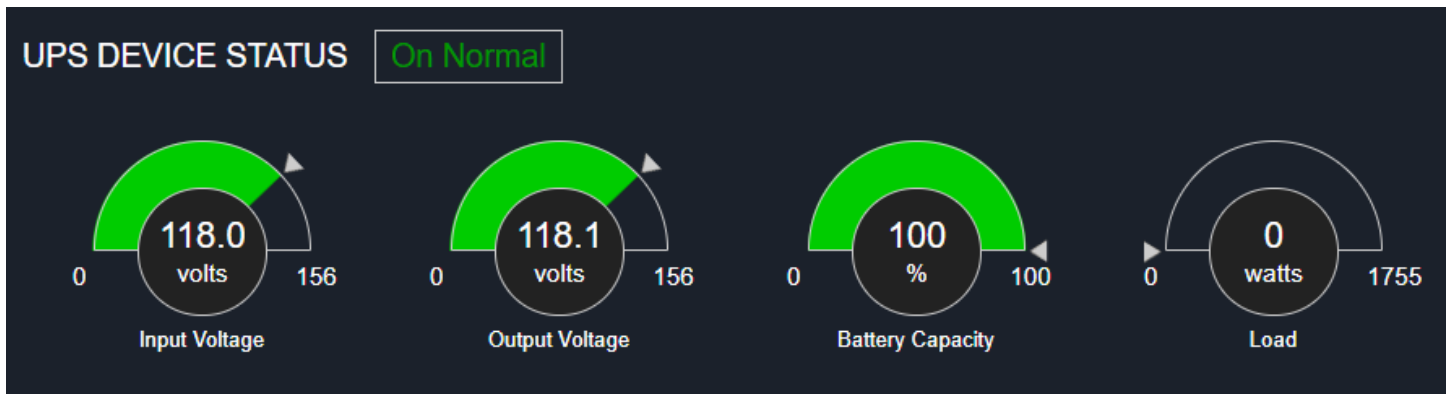
This block is only shown when the environmental sensor option is connected and provides temperature and humidity values.



For more information and configuring your sensor, see “Using Monitor >> Environment Pages” on page 55.

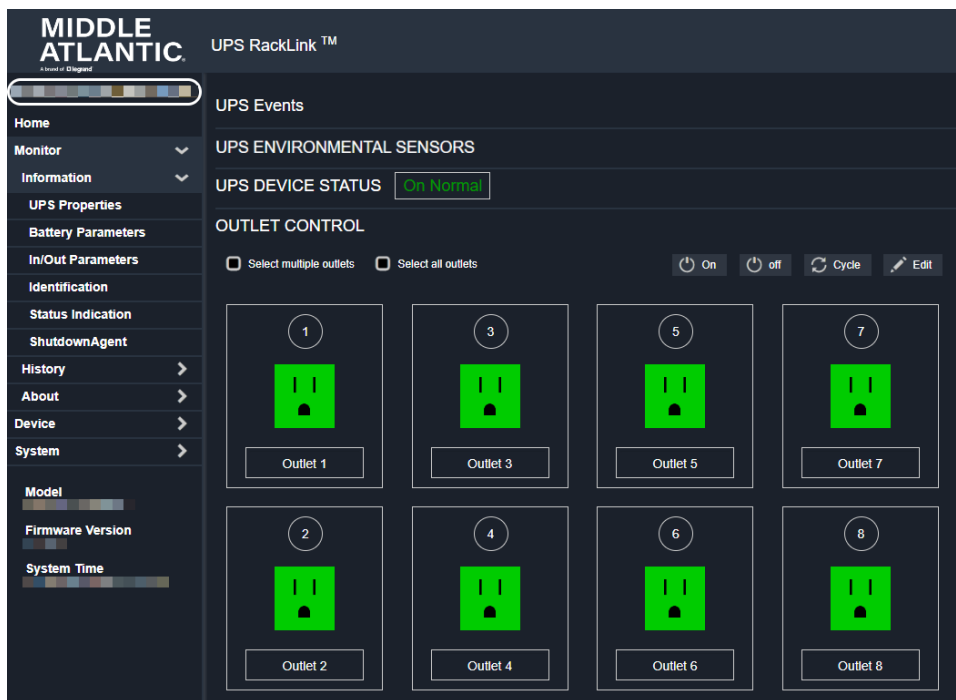
Using the Dashboard >> UPS Device Status Block

This block provides a visual overview of your UPS Status, Input Voltage, Output Voltage, Battery Capacity, and Load.

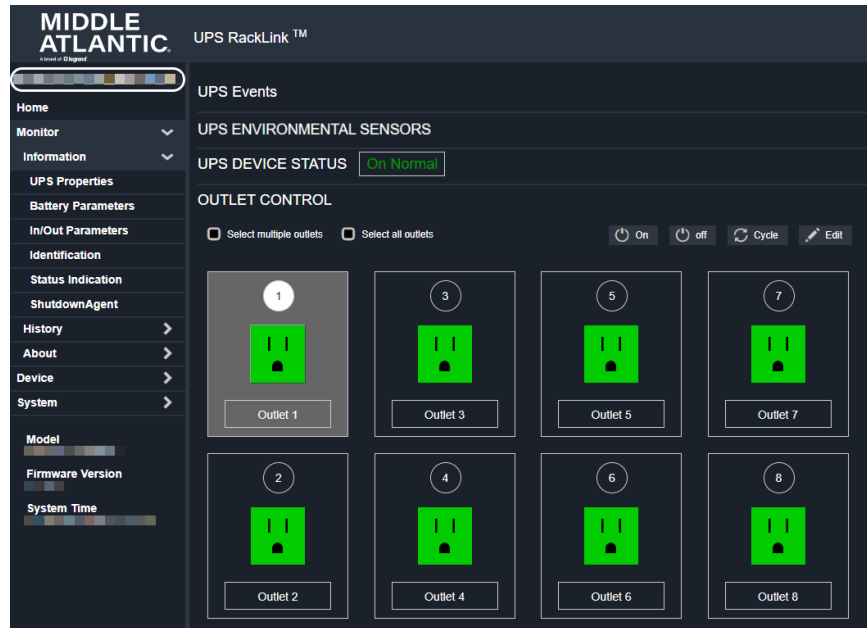


Using the Dashboard >> Outlet Control Block – Outlet Models


Outlet UPS models allow you to control each outlet individually. You can turn outlets **ON**, **OFF**, **Cycle** (for 10 seconds), and **Edit** outlet names.

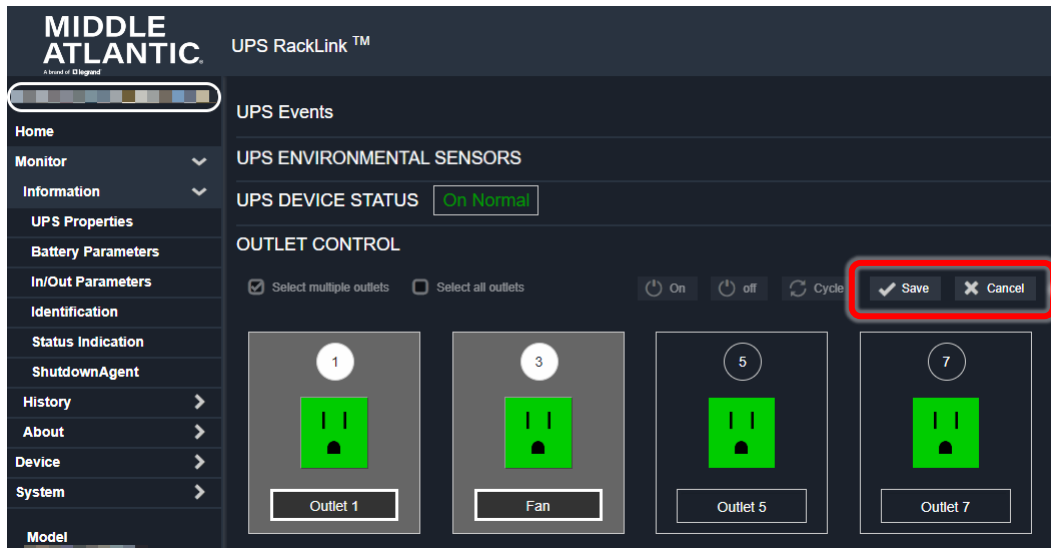


- When you mouse over an outlet, the corresponding circular number on the top center becomes highlighted. Select the outlet by clicking anywhere in the rectangular region and the entire area is shaded indicating that it's selected. Click any part of this area again to de-select the outlet.



- Mark the **Select multiple outlets** check box to control or edit multiple outlets simultaneously.
- Mark the **Select all outlets** check box to highlight all the outlets simultaneously.
- Click the **Edit** button to change your outlet names.

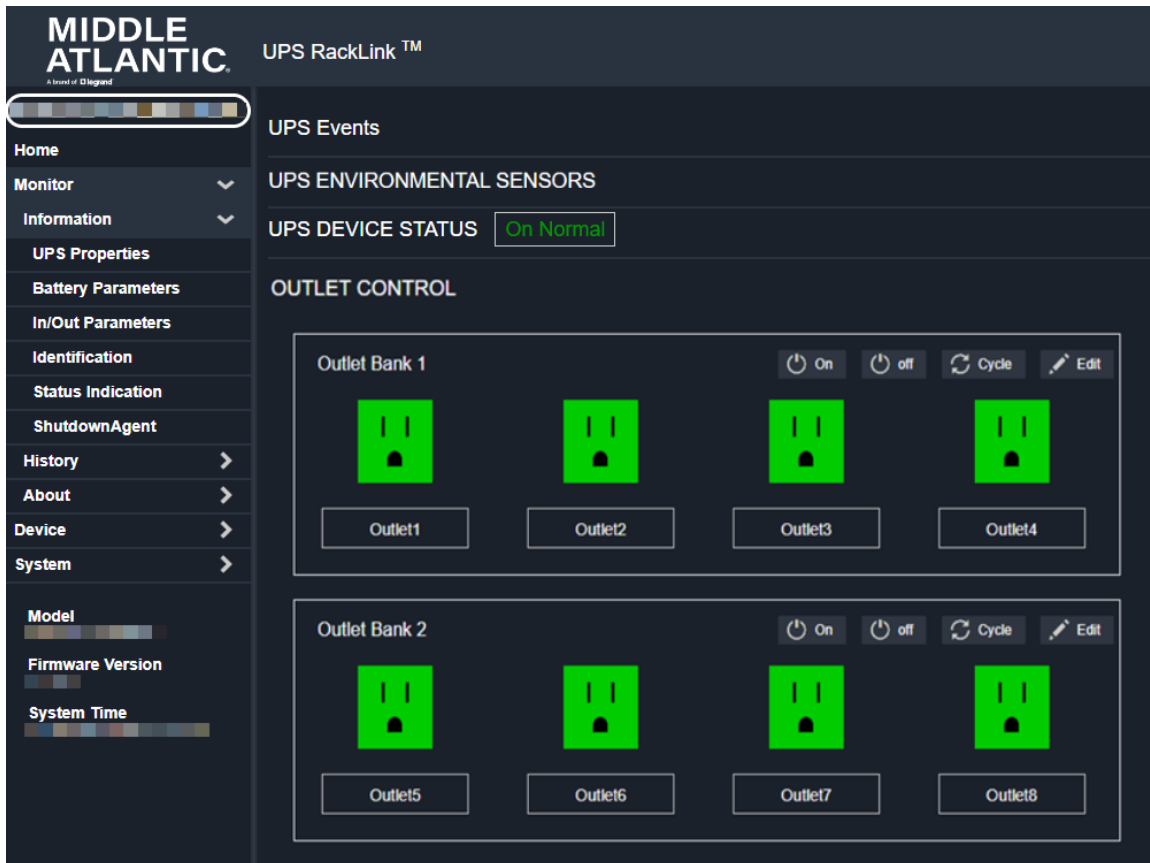
 **NOTE** When clicked, the Edit button is replaced with **Save** and **Cancel** buttons as shown.



For more information, see the Outlet or Bank Control explanation in "Using the Device >> Management >> Control Page" on page 65.


Using the Dashboard >> Outlet Control Block – Bank Models

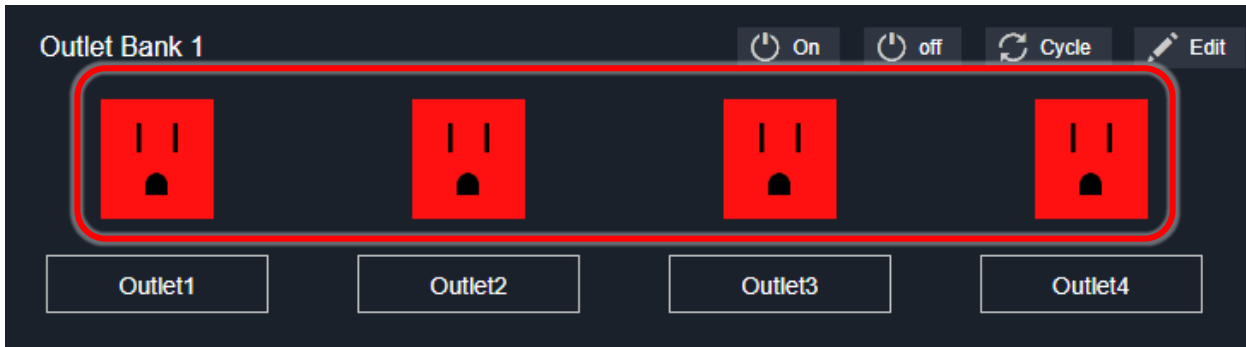
Bank UPS models allow you to control each bank individually. The banks are named Outlet Bank 1 and Outlet Bank 2. Each bank includes its own set of controls to turn it **ON**, **OFF**, **Cycle** (for 10 seconds), and **Edit** the individual outlet names.



- Click the **Off** button and confirm to turn off all of the outlets in the desired bank.

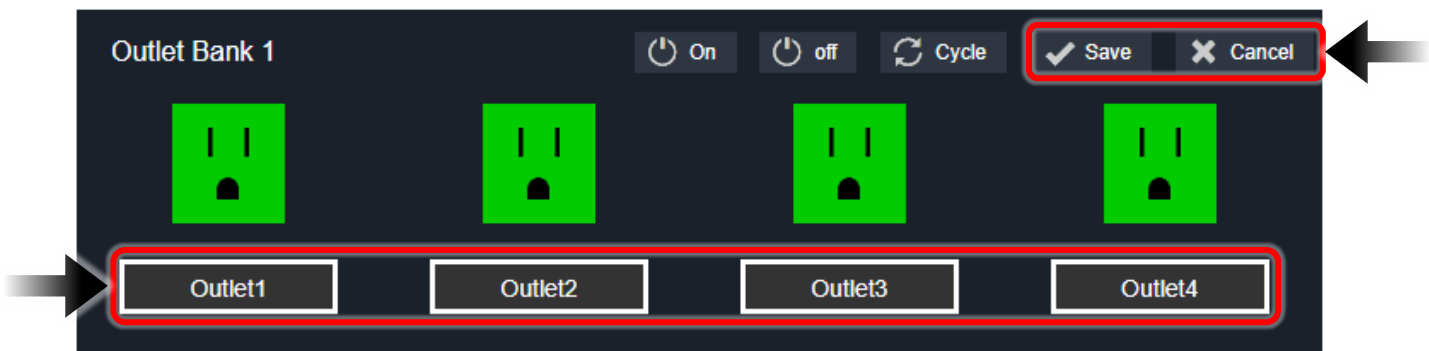


 **NOTE** Refresh your browser, if necessary, and the outlets on the bank all turn red to indicate they are off.



- Click the **Edit** button to change your bank names.

 **NOTE** When clicked, the outlet name boxes are bold (indicating you can change the names) and the Edit button is replaced with **Save** and **Cancel** buttons as shown.



For more information, see the Outlet or Bank Control explanation in "Using the Device >> Management >> Control Page" on page 65.

Using the Monitor Functions

The Monitor pages are divided into Information, History, Environment, and About sections to view or modify the settings. The following topics provide more detail about each Monitor page.

Using Monitor >> Information Pages

Pages for UPS Properties, Battery Parameters, In/Out Parameters, Identification, Status Indication, and ShutdownAgent are included under **Monitor >> Information**.

Using the Monitor >> Information >> UPS Properties Page

Click **Monitor >> Information >> UPS Properties** for a status overview of major parameters on your UPS. These values are updated automatically by the system.



TIP Some blocks and pages include shortcuts to corresponding detail or related pages.

Schedule

Next Power Off Time: None

Next Power On Time: None

Next Test Time: None

Next Deep Batt. Test Time: None

Weekly...
Specific...

Battery

Status: Normal

Capacity: 100%

Detail...

Countdown

Time To Power Off: --:--

Estimated OS Delay: --:--

Event Log...

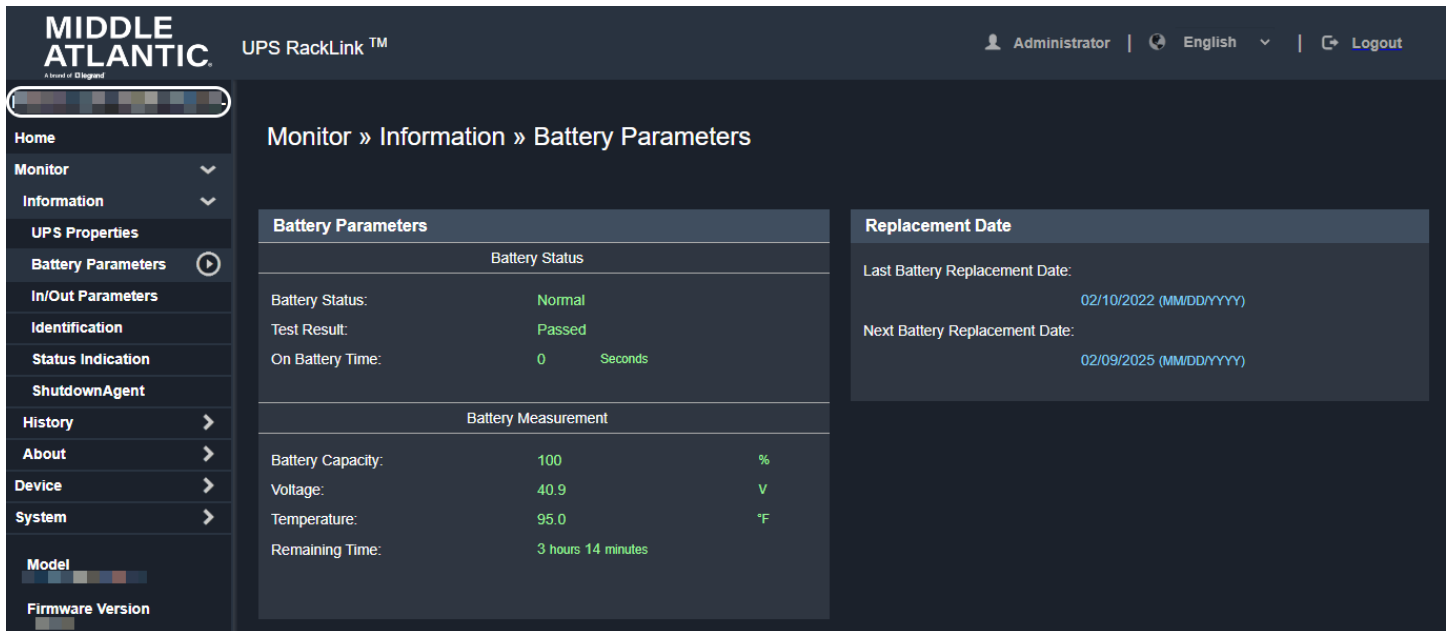
Opens the **Device >> Management >> Weekly Schedule** and **Device >> Management >> Specific Schedule** pages, respectively.

Opens the **Monitor >> Information >> Battery Parameters** page.

Opens the **Monitor >> History >> Event Log** page.

Using the Monitor >> Information >> Battery Parameters Page

Click **Monitor >> Information >> Battery Parameters** to view the information of Battery Status, Battery Measurement, Battery Replacement Date.



MIDDLE ATLANTIC UPS RackLink™ Administrator | English | Logout


Monitor » Information » Battery Parameters

Battery Parameters		
Battery Status		
Battery Status:	Normal	
Test Result:	Passed	
On Battery Time:	0	Seconds
Battery Measurement		
Battery Capacity:	100	%
Voltage:	40.9	V
Temperature:	95.0	°F
Remaining Time:	3 hours 14 minutes	

Replacement Date	
Last Battery Replacement Date:	02/10/2022 (MM/DD/YYYY)
Next Battery Replacement Date:	02/09/2025 (MM/DD/YYYY)

Using the Monitor >> Information >> In/Out Parameters Page

Click **Monitor >> Information >> In/Out Parameters** to view Input Measurement, Bypass Measurement, Output Measurement, and Outlet or Bank values.

 **NOTE** The following image comes from an Outlet model UPS. On Bank UPS models, 2 banks are shown on the lower right of the In/Out Parameters page.



MIDDLE ATLANTIC UPS RackLink™ Administrator | English | Logout

Monitor » Information » In/Out Parameters

Input Measurement		
Frequency:	60.0	Hz
Voltage:	119.2	V
Current:	0.0	A

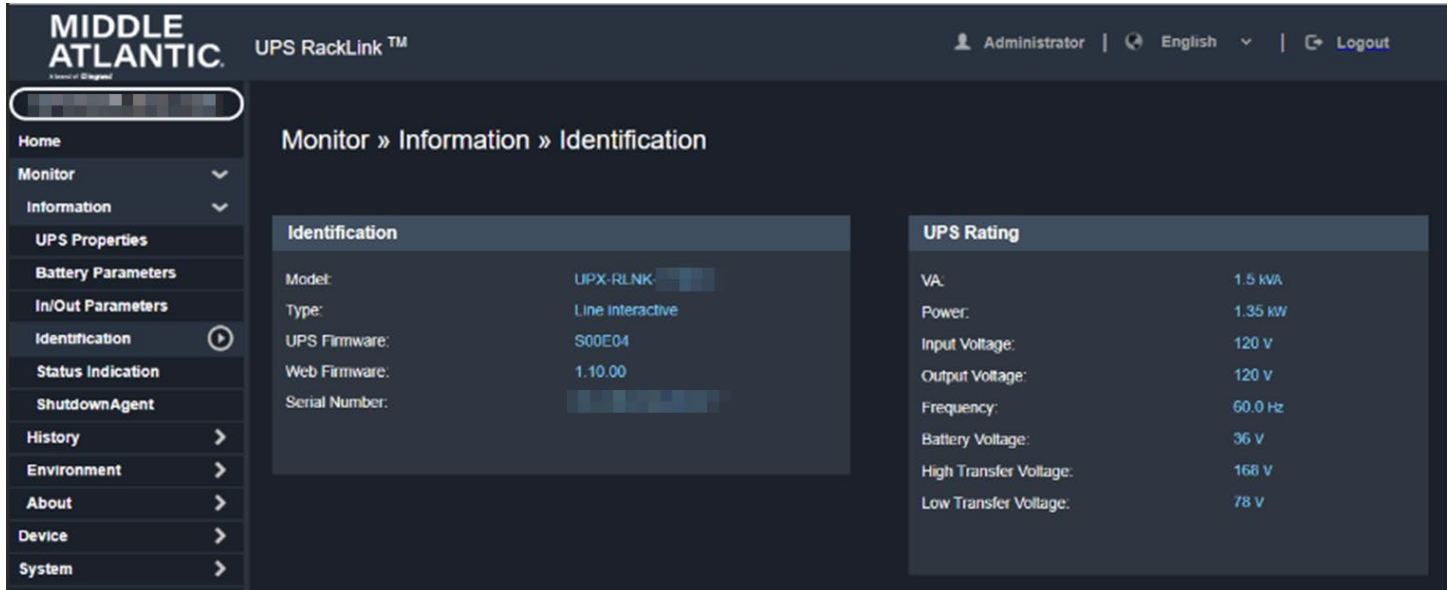
Output Measurement		
Output Source:	Normal	
Frequency:	60.0	Hz
Voltage:	119.2	V
Current:	0.0	A
Power:	0	Watt
Loading:	0	%

Outlet Bank

■ .1
 ■ .2
 ■ .3
 ■ .4
 ■ .5
 ■ .6
 ■ .7
 ■ .8

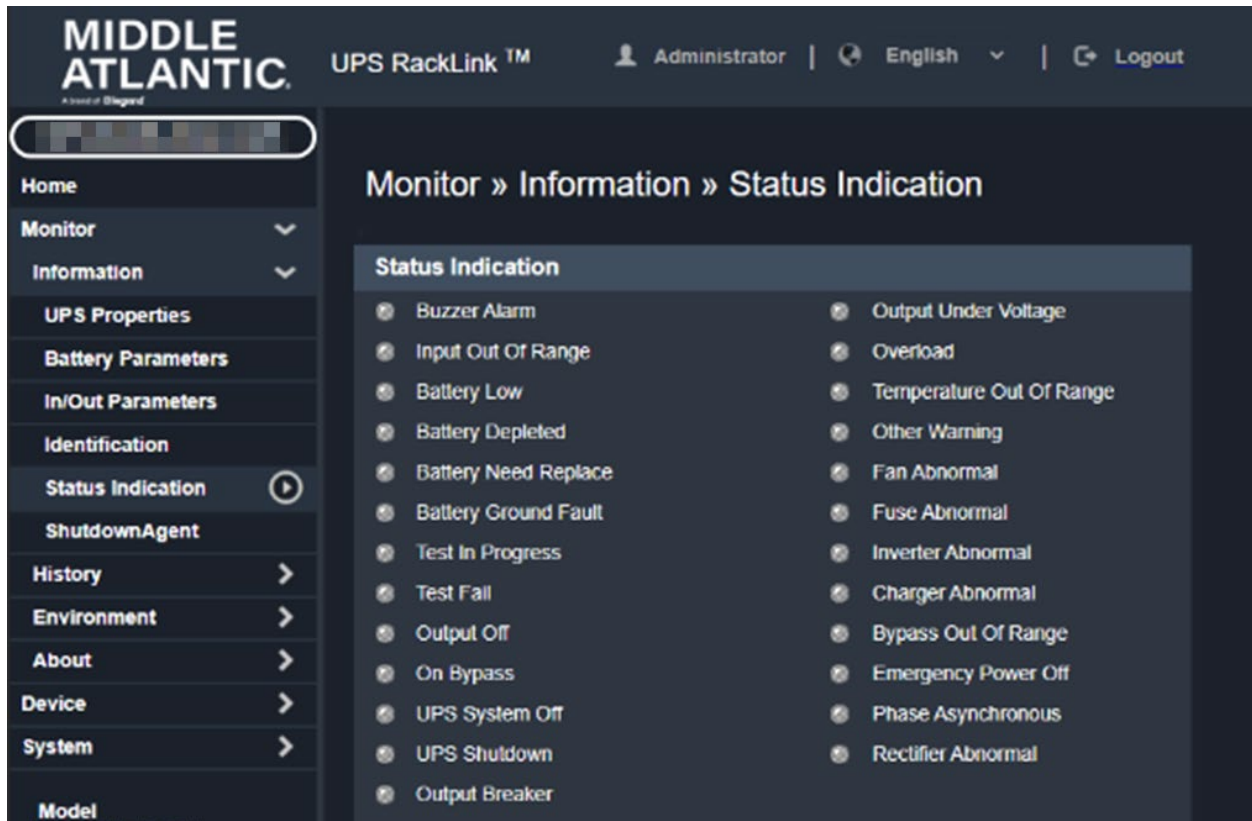
Using the Monitor >> Information >> Identification Page

Click **Monitor >> Information >> Identification** to view Identification and UPS Rating values.



Using the Monitor >> Information >> Status Indication Page

Click **Monitor >> Information >> Status Indication** to view the event list on your UPS. A corresponding green light turns on when respective events listed on this page take place on your UPS.



Using the Monitor >> Information >> ShutdownAgent Page

Click **Monitor >> Information >> ShutdownAgent** to view your designated PC shutdown information, including IP Address, OS (operating system), Countdown, Reason and Last Touch.

When downloading and installing the Shutdown Software onto PCs on the same network as your card, the Shutdown Agent can properly close the operating system on the computer before turning off any corresponding outlets or banks.

**NOTE**

The shutdown software must be installed on all workstations connected to your network card to initiate and complete operating system shutdown.

For more information, download the Shutdown Software at <https://www.legrandav.com/resources/power-downloads> and refer to the Shutdown Software user manual (100-00091) at www.legrandav.com.

Properly shutting down a PC connected to the same network as your card and running the Shutdown Software includes making configurations on this page along with the Reaction and Control pages. For more information, see “Using the Device >> Management >> Reaction Page” and “Using the Device >> Management >> Control Page” on page [58](#) and [65](#), respectively.

**TIP**

Use the Control page to trigger a Smart Shutdown and test your settings.

**NOTE**

The ShutdownAgent Page only appears if any one of the following items apply:

- Your network card is configured to use the IPv6 protocol as shown in “Configuring TCP/IP Settings for IPv6” on page [77](#).
- Your workstation has ShutdownAgent software installed.
- You specified the IP address of your workstation accessing the network card in the **Target IP** field and selected ShutdownAgent 2012 on the **Event Level** drop-down as shown.

Using Monitor >> History Pages

Pages for Event Log, Data Log, and Configure are included under **Monitor >> History**.

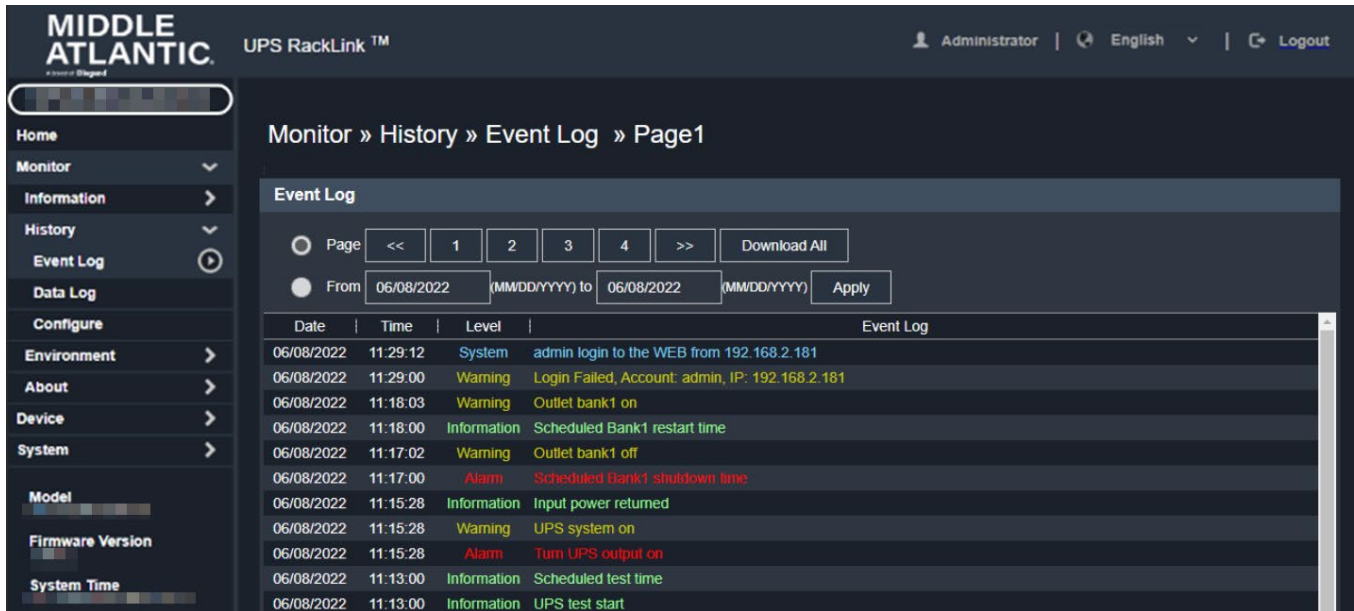
Using the Monitor >> History >> Event Log Page

Click **Monitor >> History >> Event Log** to view the event logs on your UPS. Event logs are entries that keep track of specific tasks performed by the system or users accessing your UPS.

Event log results appear in tabular form with sortable column headings for Date, Time, Level, and Event Log (description) as shown. The following fields are also available for accessing your event log data:

- Select the **Page** radio button and click **1 | 2 | 3 | 4...** to navigate the log entries as desired. After exceeding 1,000, the new log entries start overwriting the old.
- You may also click the **Download All** button to download the entire event log archive as **event_log.xls**.

- Select the second radio button, specify **From** and **To** date ranges, and click **Apply** to restrict the values displayed on the table as desired.

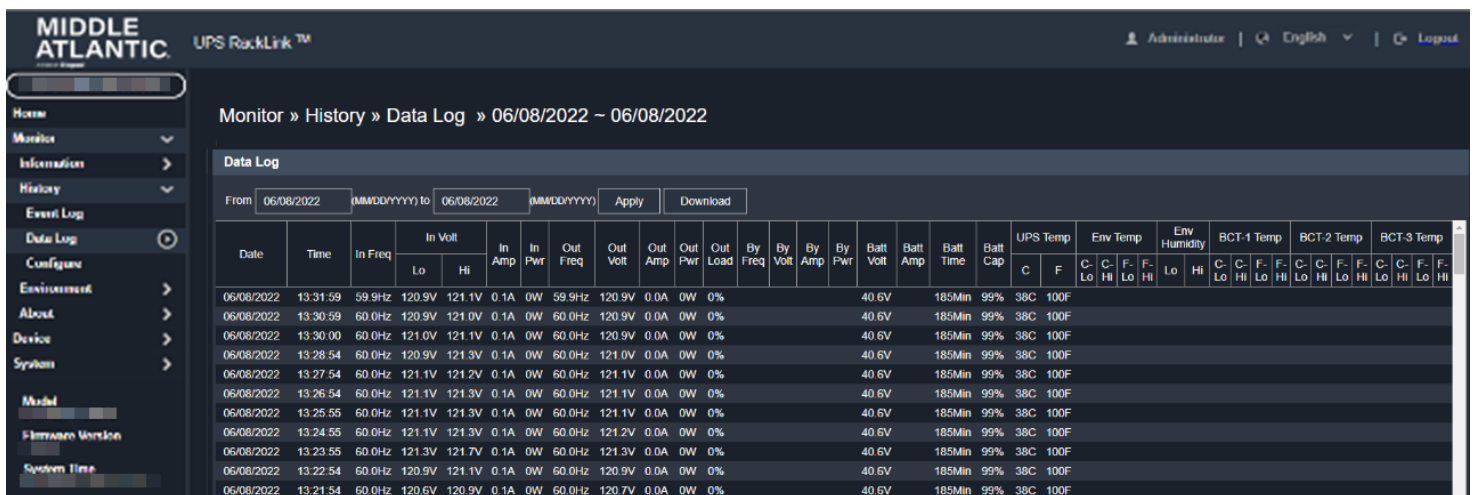


Using the Monitor >> History >> Data Log Page

Click **Monitor >> History >> Data Log** to view the saved data logs on your UPS. Data logs are entries containing measurements and system value information about devices connected to your UPS system.

Data log results appear in a single, scrollable table with sortable column headings for Date, Time, and other details as shown. The following fields are also available for accessing data log information:

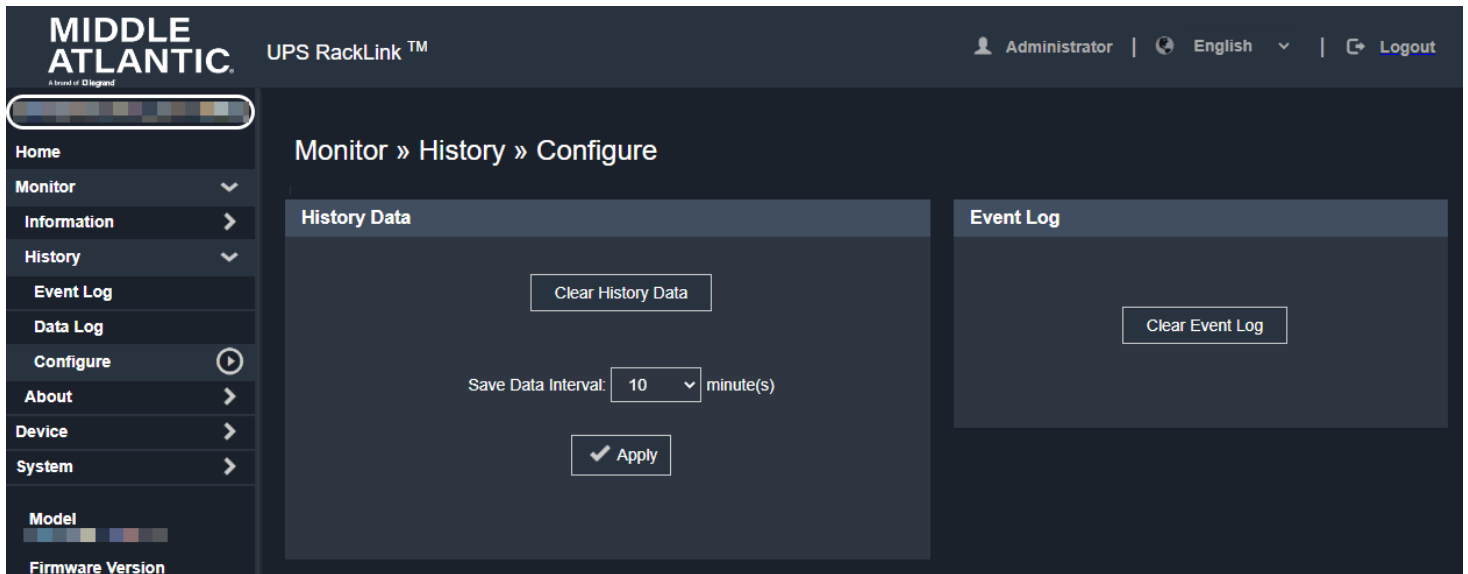
- Specify **From** and **To** date ranges and click **Apply** to restrict the values displayed on the table as desired.
- You may also click the **Download** button to download the entire data log archive (or range specified) as **data_log.xls**.



Using the Monitor >> History >> Configure Page

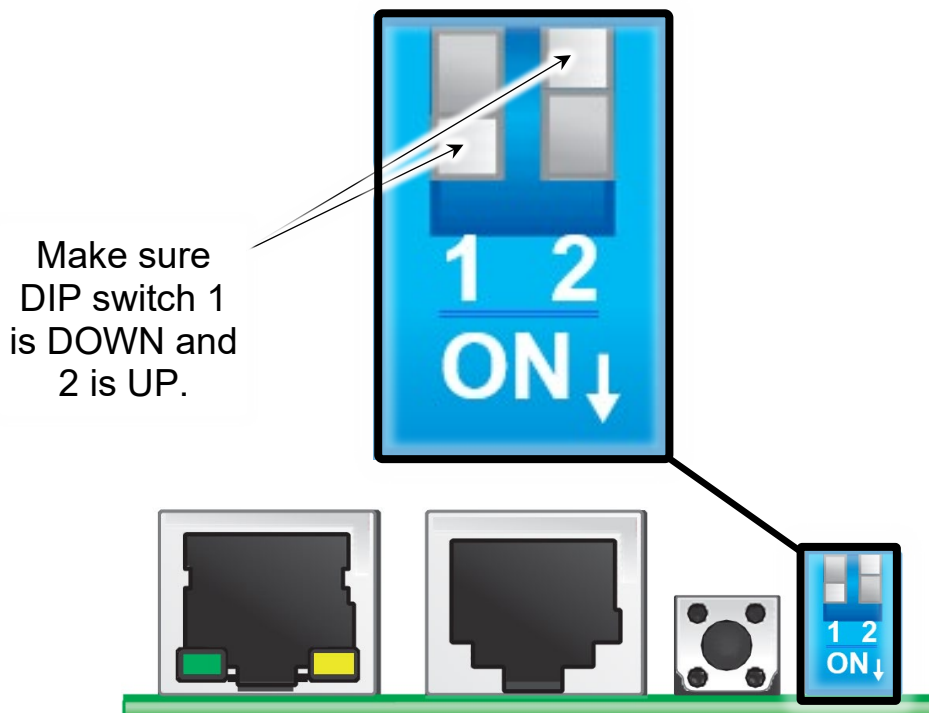
Click **Monitor >> History >> Configure** to perform the following:

- Click the **Clear History Data** button to erase the history data kept on your network card and UPS.
- Use the **Save Data Interval** drop-down and click the **Apply** button to specify the data log save interval (in minutes).
- Click the **Clear Event Log** button to erase all event logs kept on your network card and UPS.



Using Monitor >> Environment Pages

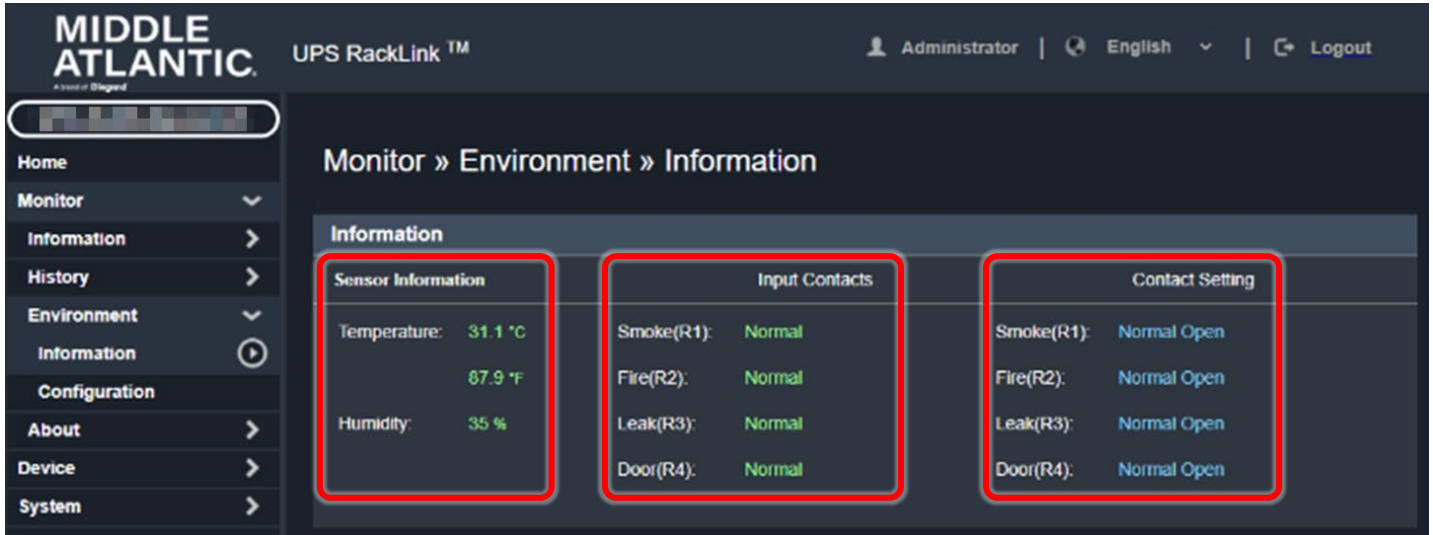
The Environment pages are only shown when the UPS environmental sensor option is correctly connected to the UPS through your network card. Before connecting your environmental sensor, the DIP switches on the network card must be set with switch 1 down (ON) and switch 2 up (OFF) as shown.



Web interface pages for Information and Configuration are included under **Monitor >> Environment**. Use the environment pages to monitor and setup your UPS environmental sensor. For more information about setting up your environmental sensor, refer to the UPS Environmental Sensor User Manual (100-00075) at www.legrandav.com.

Using the Monitor >> Environment >> Information Page

Click **Monitor >> Environment >> Information** to see your UPS environmental Sensor Information, Input Contacts, and Contact Setting values.



Using the Monitor >> Environment >> Configuration Page

Click **Monitor >> Environment >> Configuration** to view and configure your UPS environmental sensor and input contact using fields on Sensor Configuration and Input Contact Configuration sections of the screen.

Modify settings as desired and click **Submit** to apply the changes onto your UPS.


Sensor Configuration Settings

- **Warning Threshold:** Provide a temperature value in the **Warning Threshold** text box that produces a warning from the system when met.
- **Alarm Threshold:** Provide a temperature value in the **Alarm Threshold** text box that sounds a system alarm when met.
- **Smart Shutdown:** Mark or clear the corresponding **Smart Shutdown** check box to execute a smart shutdown when the specified temperature threshold value is met.

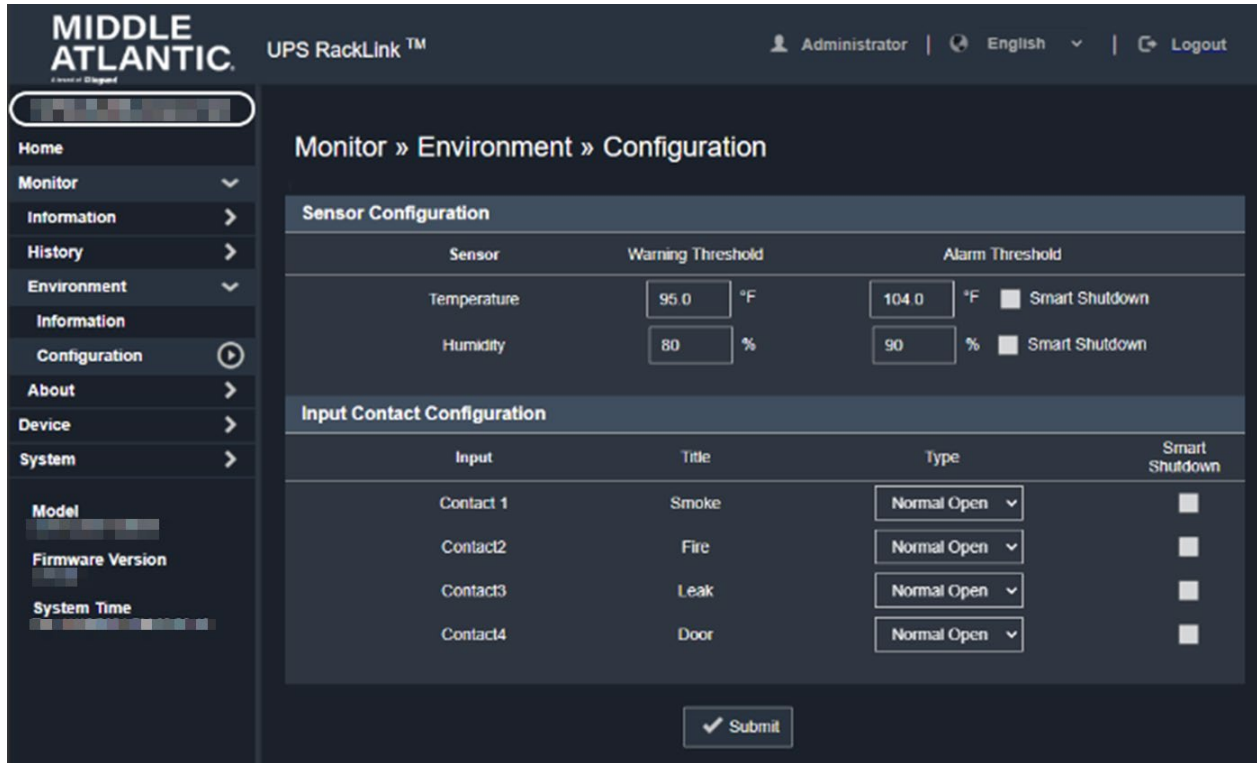
Input Contact Configuration Settings

- **Input:** Displays a list of your sensor input contacts.
- **Title:** Displays corresponding contact titles for each sensor input contact.
- **Type:** Use the **Type** drop-down to set the contact type as Normal Open or Normal Closed, as desired.

- **Smart Shutdown:** Mark or clear the corresponding **Smart Shutdown** check box to execute a smart shutdown when the contact type you set is changed.



REMINDER If you set your contact to be normally open, a smart shutdown occurs when the contact is closed and vice versa.

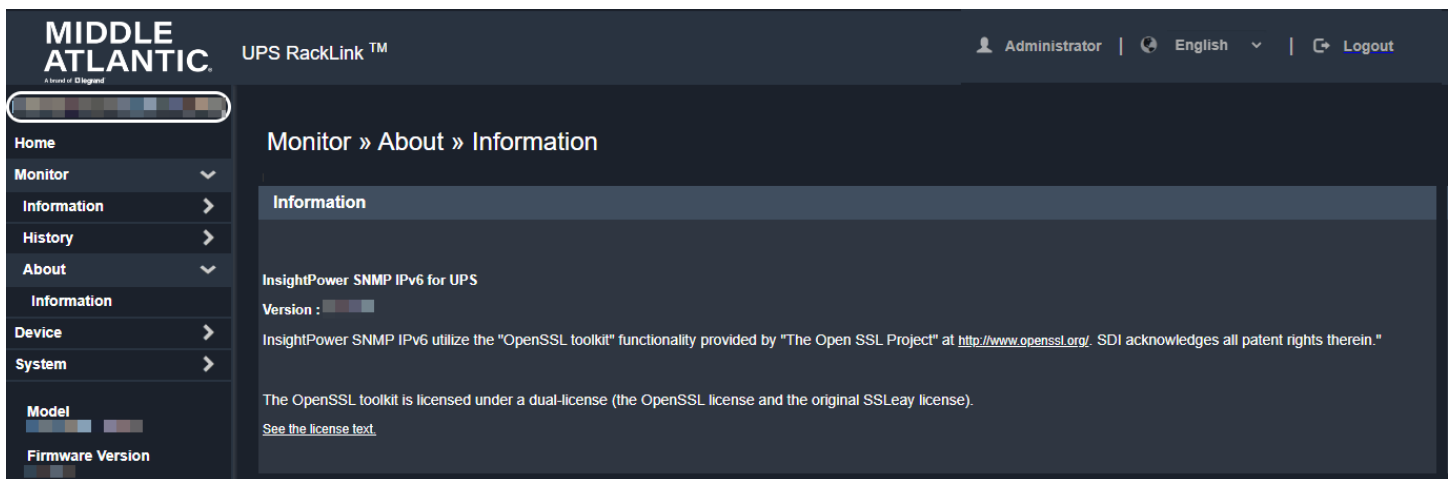


Sensor	Warning Threshold	Alarm Threshold
Temperature	95.0 °F	104.0 °F <input type="checkbox"/> Smart Shutdown
Humidity	80 %	90 % <input type="checkbox"/> Smart Shutdown

Input	Title	Type	Smart Shutdown
Contact 1	Smoke	Normal Open	<input type="checkbox"/>
Contact2	Fire	Normal Open	<input type="checkbox"/>
Contact3	Leak	Normal Open	<input type="checkbox"/>
Contact4	Door	Normal Open	<input type="checkbox"/>

Viewing Monitor >> About >> Information

Click **Monitor >> About >> Information** to view the version of your network card and other information about the OpenSSL toolkit and licenses.



Information

InsightPower SNMP IPv6 for UPS
 Version : [redacted]

InsightPower SNMP IPv6 utilize the "OpenSSL toolkit" functionality provided by "The Open SSL Project" at <http://www.openssl.org/>. SDI acknowledges all patent rights therein.

The OpenSSL toolkit is licensed under a dual-license (the OpenSSL license and the original SSLeay license).
[See the license text.](#)

Configuring and Controlling Your Device Using Device >> Management Pages

Configuring and controlling your UPS is done using the Management pages. Corresponding pages include settings for Reaction, Configure, Control, Weekly Schedule, Specific Schedule, and Event Level functions.

Using the Device >> Management >> Reaction Page

Click **Device >> Management >> Reaction** to configure shutdown reaction times for the devices connected to outlets or banks (depending on your UPS model) on your UPS. With the shutdown software installed on connected PCs, this page also supports the proper shut down of operating systems (where applicable) before terminating power to a corresponding outlet or bank.



NOTE

The Shutdown Software must be installed on all workstations connected to your network card to initiate and complete operating system shutdowns.

On the Reaction portion of the page, mark the corresponding check boxes and specify delay times (in seconds) as desired for the Power Fail, Battery Low, and Overload events listed as rows.

Reaction		UPS Shutdown Delay (in seconds)	Load Bank-1 Off Delay (in seconds)
Event			
1	Power Fail	<input type="checkbox"/> 0	<input checked="" type="checkbox"/> 10
2	Battery Low	<input checked="" type="checkbox"/> 20	<input type="checkbox"/> 0
3	Overload	<input type="checkbox"/> 0	<input type="checkbox"/> 0

The first column represents the entire UPS system including all outlets or banks. Subsequent columns differ on Outlet or Bank UPS models. Outlet models display 8 banks as columns and represent each outlet on the UPS. Bank models display 2 banks and represent the 2 separate banks of outlets 1 – 4 and 5 - 8 on your UPS.

When finished making shutdown reaction delay settings and Smart Shutdown settings, click **Submit** to apply the changes onto your UPS.

Reaction Event Settings

- **UPS Shutdown Delay:** Mark the check box to provide a number (in seconds) for the corresponding event delay before shutting down the UPS.
- **Load Bank-X Off Delay:** Mark the check box to provide a number (in seconds) for the corresponding event delay before turning off the specific bank.

The screenshot shows a table titled "Reaction" with the following columns: "Event", "UPS Shutdown Delay (in seconds)", "Load Bank-1 Off Delay (in seconds)", "Load Bank-2 Off Delay (in seconds)", and "Load Bank-3 Off Delay (in seconds)". The table contains three rows of events: "1 Power Fail", "2 Battery Low", and "3 Overload". Each cell contains a checkbox and a text input field. Callouts explain that the first column applies to the entire UPS system, the next two columns apply to outlets 1 and 2, and the last column applies to Bank-8 on Outlet UPS models.

Event	UPS Shutdown Delay (in seconds)	Load Bank-1 Off Delay (in seconds)	Load Bank-2 Off Delay (in seconds)	Load Bank-3 Off Delay (in seconds)
1 Power Fail	<input type="checkbox"/> 0	<input checked="" type="checkbox"/> 10	<input type="checkbox"/> 0	<input type="checkbox"/> 0
2 Battery Low	<input checked="" type="checkbox"/> 20	<input type="checkbox"/> 0	<input type="checkbox"/> 0	<input type="checkbox"/> 0
3 Overload	<input type="checkbox"/> 0	<input type="checkbox"/> 0	<input type="checkbox"/> 0	<input type="checkbox"/> 0

TIP Configure shutdown reactions on either outlets or banks (depending on your UPS model) to load shed devices connected to your UPS.

When downloading and installing the Shutdown Software onto PCs on the same network as your card, the Shutdown Agent can properly close the operating system on the computer before turning off any corresponding outlets or banks. You can specify additional time amounts for Estimated OS Shutdown Delay and UPS Shutdown Delay (both in seconds) – on top of the ones set for event reactions – to initiate and wait for operating system closure on workstations connected to your network card before shutting down outlets on your UPS. Mark the Perform Smart Shutdown in Schedule check box to include the Estimated OS Shutdown Delay and UPS Shutdown Delay times specified.

Smart Shutdown Settings

- **Estimated OS Shutdown Delay:** Provide a number (in seconds) for the system to initiate and wait for operating system closure on workstations connected to your network card before shutting down outlets on your UPS.
- **UPS Shutdown Delay:** Provide a number (in seconds) for the system to include an additional time delay to the UPS shutdown from any time specified for the events listed above.

- **Perform Smart Shutdown in Schedule:** Mark this check box to include the Estimated OS Shutdown Delay and UPS Shutdown Delay times specified for the Smart Shutdown.

Smart Shutdown

Estimated OS Shutdown Delay

UPS Shutdown Delay

Perform **Smart Shutdown in Schedule**

To start Smart Shutdown manually, please visit the **Control** page.

Description:
The **Smart Shutdown** mechanism is used to shutdown all of the connected computers and the UPS safely by one click.
First of all you should estimate the longest **OS Shutdown Delay** time of your operating systems, which have the shutdown software installed and are connected to this card.
The card will delay the assigned OS Shutdown Delay time to wait for all of the OSes that are shutdown by the shutdown software and then send the **UPS Shutdown Delay** time to turn off the UPS.

NOTE The shutdown software must be installed on all workstations connected to your network card to initiate and complete operating system shutdown.

For more information, download the Shutdown Software at <https://www.legrandav.com/resources/power-downloads> and refer to the Shutdown Software User Manual (100-00091) at www.legrandav.com.

Properly shutting down a PC connected to the same network as your card and running the Shutdown Software includes making configurations on this page along with the ShutdownAgent and Control pages. For more information, see “Using the Monitor >> Information >> ShutdownAgent Page” and “Using the Device >> Management >> Control Page” on page 53 and 65, respectively.

TIP Use the Control page to trigger a Smart Shutdown and test your settings.

The example shown in the screenshot below delays a UPS shut down for 20 seconds whenever a Battery Low event is detected on an Outlet model UPS.

Device » Management » Reaction

Reaction									
Event	UPS Shutdown Delay (in seconds)	Load Bank-1 Off Delay (in seconds)	Load Bank-2 Off Delay (in seconds)	Load Bank-3 Off Delay (in seconds)	Load Bank-4 Off Delay (in seconds)	Load Bank-5 Off Delay (in seconds)	Load Bank-6 Off Delay (in seconds)	Load Bank-7 Off Delay (in seconds)	Load Bank-8 Off Delay (in seconds)
1 Power Fail	<input type="checkbox"/> 0	<input checked="" type="checkbox"/> 10	<input type="checkbox"/> 0	<input type="checkbox"/> 0	<input type="checkbox"/> 0	<input type="checkbox"/> 0	<input type="checkbox"/> 0	<input type="checkbox"/> 0	<input type="checkbox"/> 0
2 Battery Low	<input checked="" type="checkbox"/> 20	<input type="checkbox"/> 0	<input type="checkbox"/> 0	<input type="checkbox"/> 0	<input type="checkbox"/> 0	<input type="checkbox"/> 0	<input type="checkbox"/> 0	<input type="checkbox"/> 0	<input type="checkbox"/> 0
3 Overload	<input type="checkbox"/> 0	<input type="checkbox"/> 0	<input type="checkbox"/> 0	<input type="checkbox"/> 0	<input type="checkbox"/> 0	<input type="checkbox"/> 0	<input type="checkbox"/> 0	<input type="checkbox"/> 0	<input type="checkbox"/> 0

Smart Shutdown

Estimated OS Shutdown Delay

UPS Shutdown Delay

Perform **Smart Shutdown in Schedule**

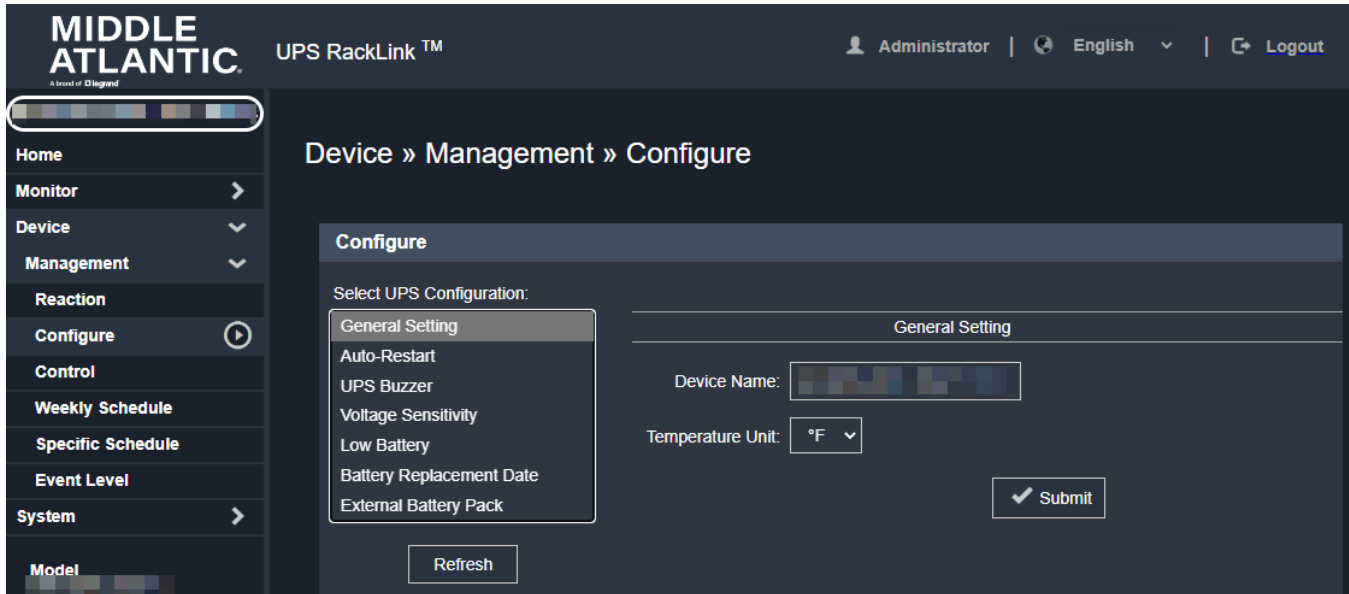
To start Smart Shutdown manually, please visit the **Control** page.

Description:
The **Smart Shutdown** mechanism is used to shutdown all of the connected computers and the UPS safely by one click.
First of all you should estimate the longest **OS Shutdown Delay** time of your operating systems, which have the shutdown software installed and are connected to this card.
The card will delay the assigned OS Shutdown Delay time to wait for all of the OSes that are shutdown by the shutdown software and then send the **UPS Shutdown Delay** time to turn off the UPS.

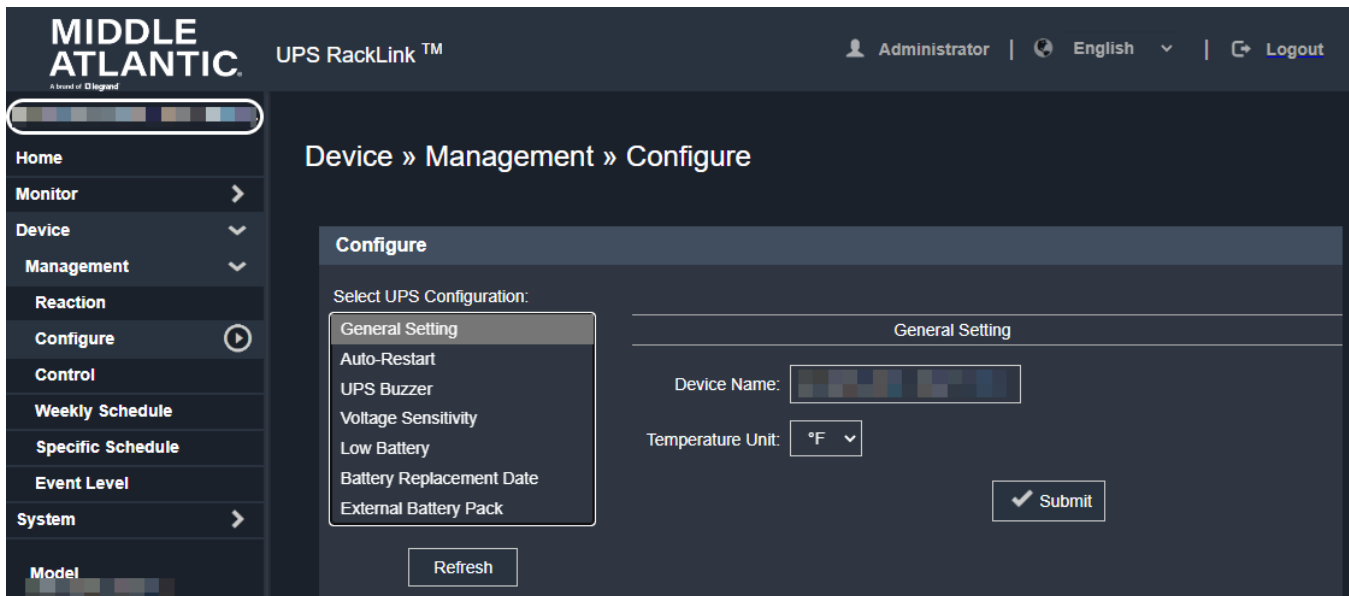
Using the Device >> Management >> Configure Page

Click **Device >> Management >> Configure** to configure General, Auto-Restart, UPS Buzzer, Voltage Sensitivity, Low Battery, Battery Replacement Date, and External Battery Pack settings and functions on your UPS. The rest of this topic provides more detail the available settings on each of these pages.


Modify the following settings as desired and click **Submit** to apply the changes onto your UPS.



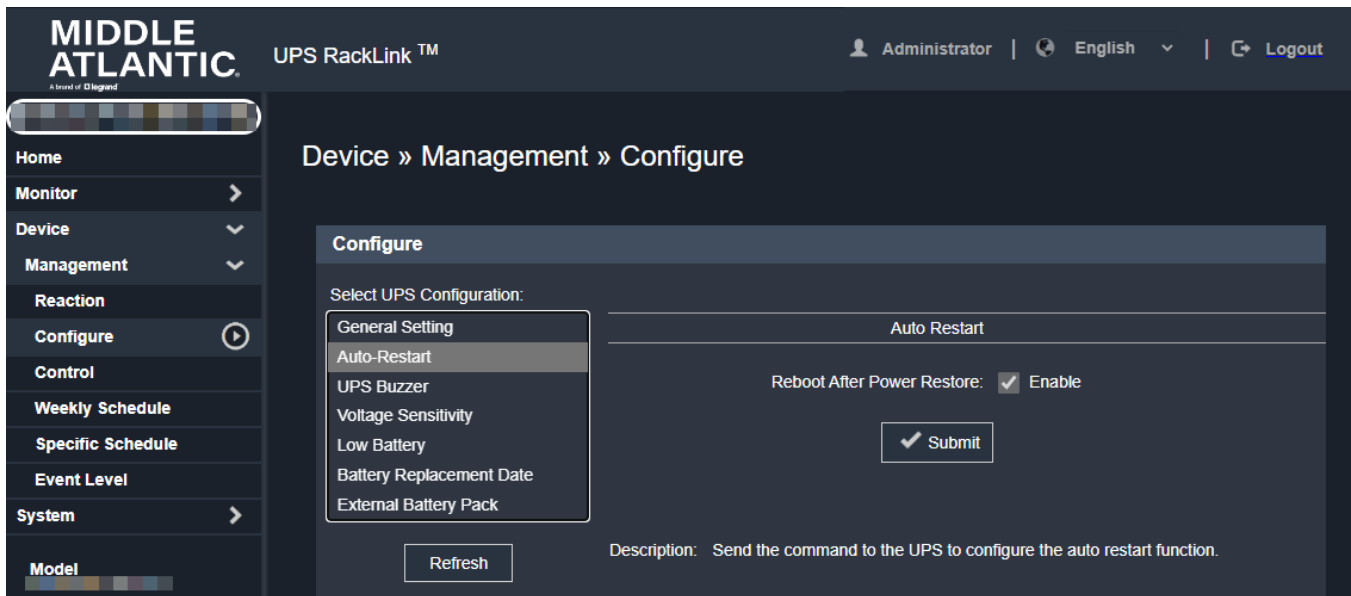
- **Select UPS Configuration:** Use the **Select UPS Configuration** sub menu to navigate the different configuration pages.
- **Refresh:** Click the **Refresh** button to read any recent settings that may have been applied on your connected UPS into the network card.
- **General Setting:** Select to modify the device name, choose the default temperature unit, and click **Submit** to save the changes on your UPS.




- **Auto-Restart:** Select and click **Submit** to enable auto restart on your UPS.



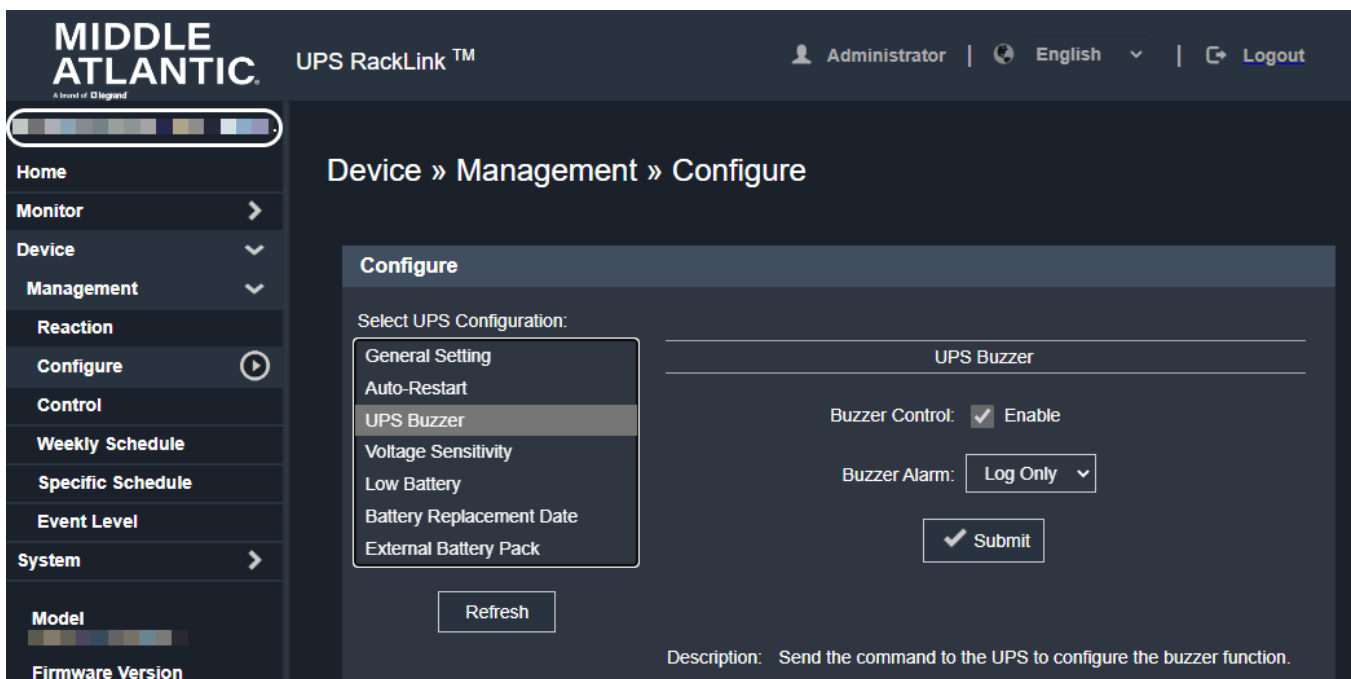
NOTE This does not actually restart the UPS. It enables the auto restart function on your UPS so it may be triggered by an event.



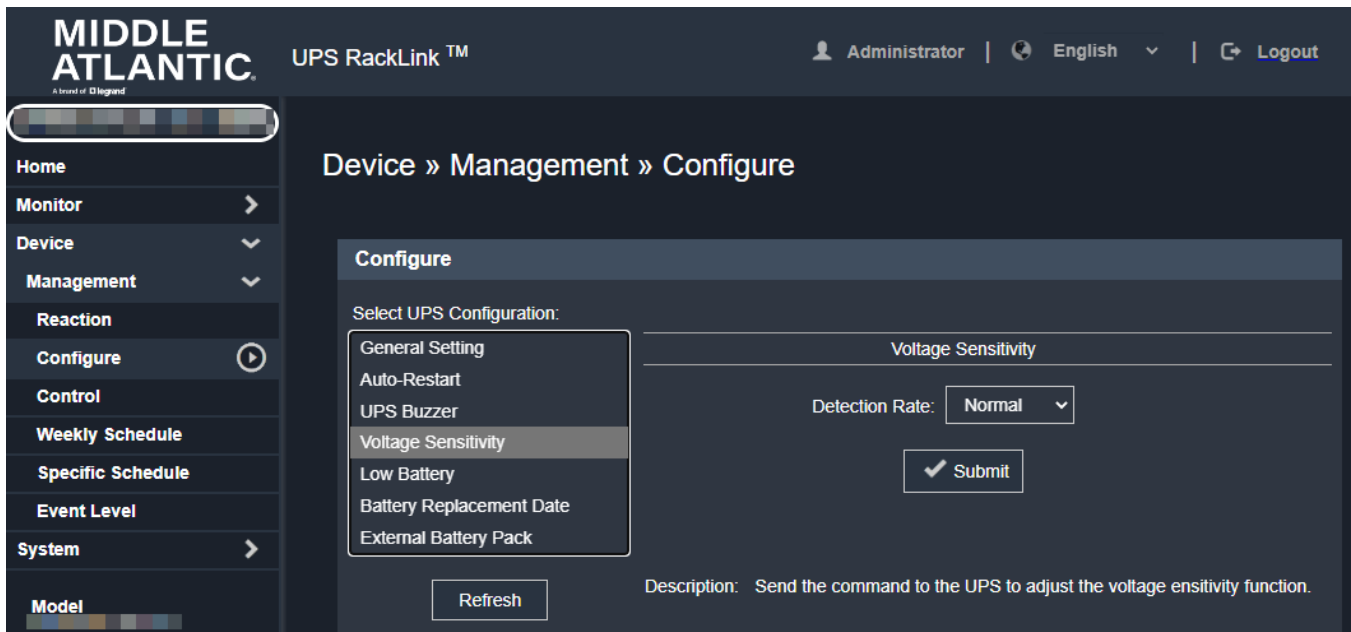
- **UPS Buzzer:** Select and click **Submit** to enable the buzzer on your UPS as desired. Use the **Buzzer Alarm** drop-down to choose the behavior when the function is triggered by an event. Choose from Alarm to sound the buzzer and create a log entry or Log Only to forego the alarm, but still create the entry.



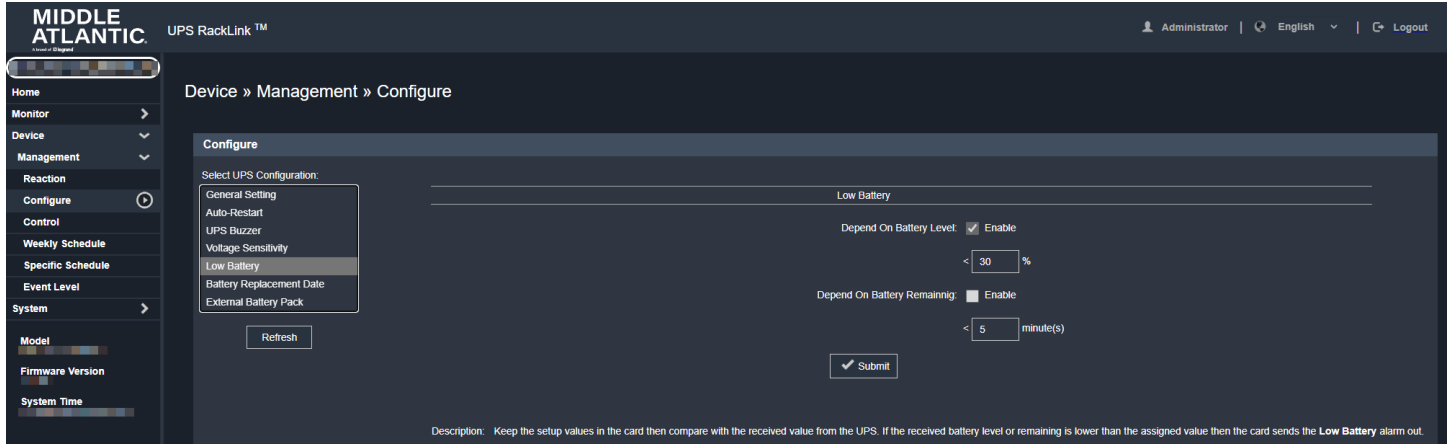
NOTE This does not actually sound the buzzer on the UPS. It enables the buzzer on your UPS so it may be triggered by an event.



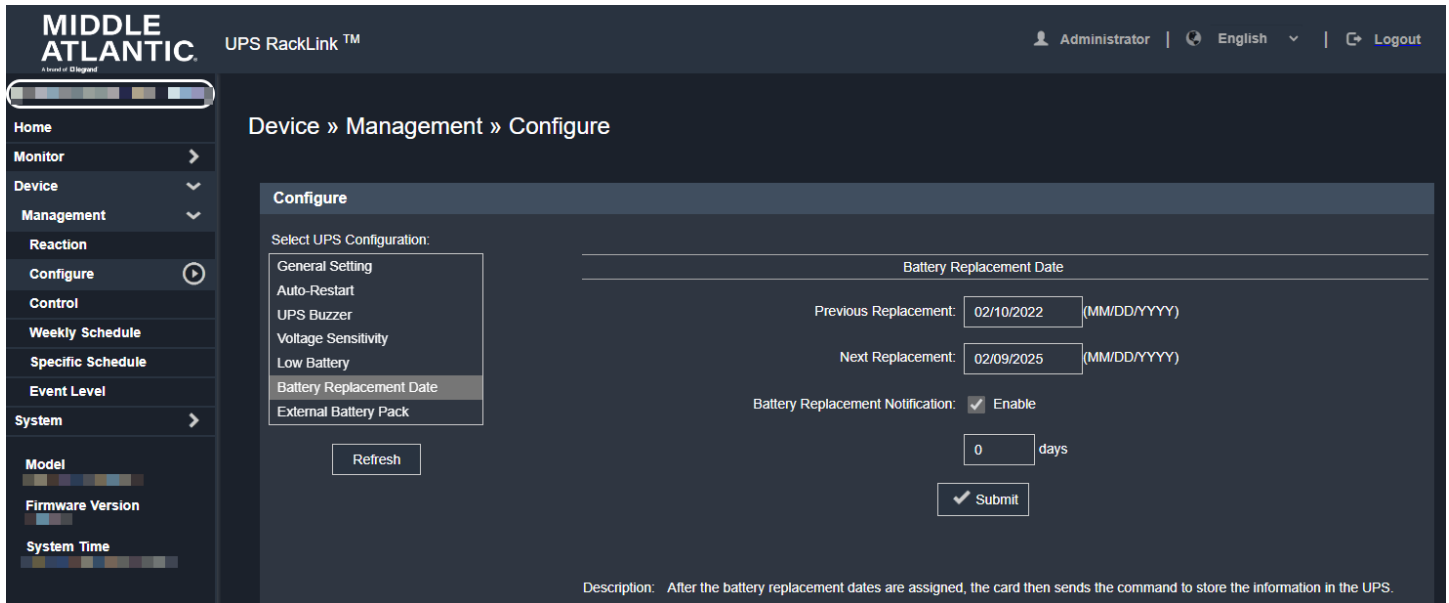
- Voltage Sensitivity:** Use the Detection Rate drop-down to choose from Normal, Reduced, and Low voltage sensitivity options and click **Submit** to save the changes on your UPS.




- Low Battery:** Select to modify the low battery threshold and click **Submit** to save the changes on your UPS. The system compares the low threshold level setting with values detected on your UPS and triggers a low battery alarm if the threshold is reached.



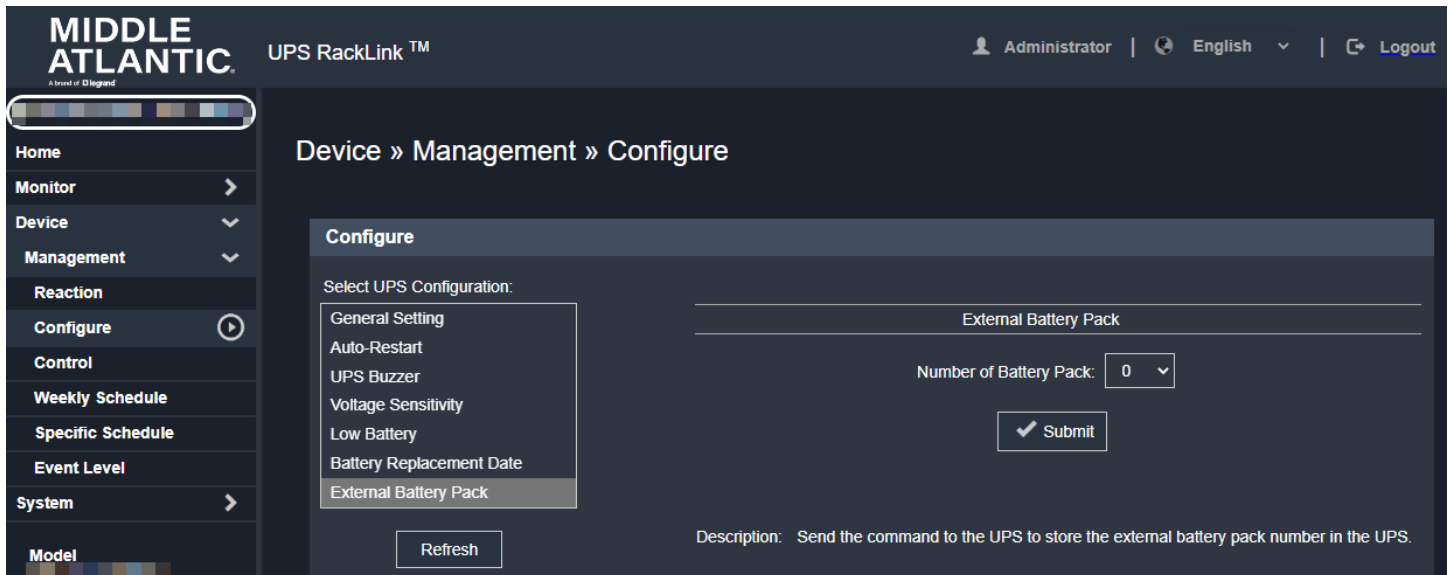
- Battery Replacement Date:** Select to modify the battery replacement dates and click **Submit** to save the changes on your UPS.



- External Battery Pack:** Select to modify the number of external batteries connected to your UPS and click **Submit** to save the changes.



NOTE If you select Auto from this corresponding field on the front panel of your UPS, this field is disabled, and the system automatically detects and displays the number of expandable runtime batteries on your system.



Using the Device >> Management >> Control Page

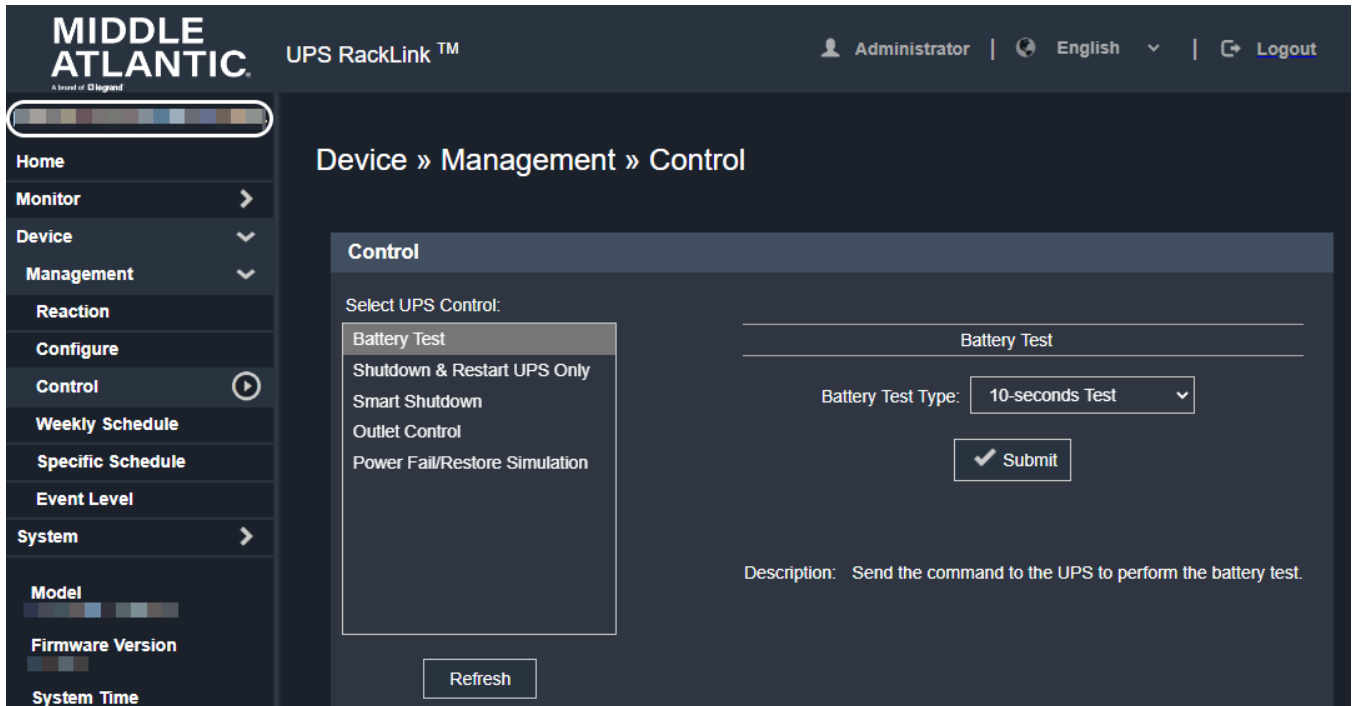
Click **Device >> Management >> Control** to configure Battery Test, Shutdown & Restart UPS Only, Smart Shutdown, Outlet Control, and Power Fail/Restore Simulation settings and functions on your UPS. The rest of this topic provides more detail the available settings on each of these pages.

Modify the following settings as desired and click **Submit** to apply the changes onto your UPS.


The screenshot shows the web interface for a Middle Atlantic UPS RackLink. The top navigation bar includes the logo, the product name 'UPS RackLink™', the user role 'Administrator', the language 'English', and a 'Logout' button. A left sidebar contains a navigation menu with options: Home, Monitor, Device, Management, Reaction, Configure, Control (highlighted), Weekly Schedule, Specific Schedule, Event Level, System, Model, Firmware Version, and System Time. The main content area is titled 'Device » Management » Control' and features a 'Control' sub-menu with options: Battery Test (selected), Shutdown & Restart UPS Only, Smart Shutdown, Outlet Control, and Power Fail/Restore Simulation. Below the sub-menu is a 'Refresh' button. The 'Battery Test' configuration section includes a 'Battery Test Type' dropdown menu set to '10-seconds Test' and a 'Submit' button with a checkmark. A description below reads: 'Description: Send the command to the UPS to perform the battery test.'

- **Select UPS Control:** Use the **Select UPS Control** sub menu to navigate the different control pages.
- **Refresh:** Click the **Refresh** button to read any recent settings that may have been applied on your connected UPS into the network card.

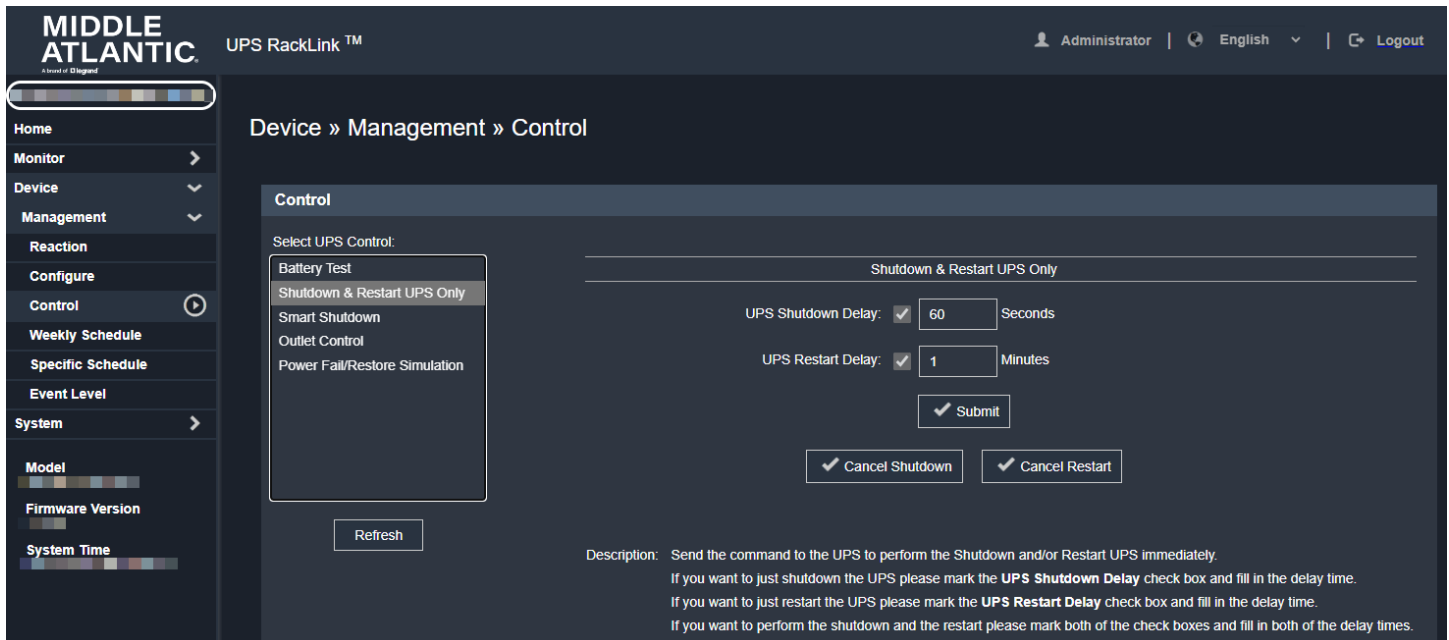
- Battery Test:** Use the **Battery Test Type** drop-down to choose from Abort Test, 10-seconds Test, and Test Until Battery Low options.



- Shutdown & Restart UPS Only:** Select to modify how your UPS shuts down and/or restarts.



REMINDER The **UPS Shutdown Delay** field shown here is the same as the one on the **Device >> Management >> Reaction** page. For more information, see “Using the Device >> Management >> Reaction Page” on page **58**.



- Mark the UPS Shutdown Delay check box and specify a delay time (in seconds), if desired.
- Mark the UPS Restart Delay check box and specify a delay time (in minutes).

You may select and provide one or both check boxes and delay times, if desired. Click **Submit** to save the changes on your UPS.

- **Smart Shutdown:** Click the **Start Smart Shutdown** button to manually execute a smart shutdown of connected computers and your UPS.

You can use this button to trigger a shutdown and test the Smart Shutdown settings you made on the ShutdownAgent and Reaction pages. For more information, see “Using the Monitor >> Information >> ShutdownAgent Page” and “Using the Device >> Management >> Reaction Page” on page [53](#) and [58](#), respectively.



REMINDER

The seconds displayed for **Estimated OS Shutdown Delay** and the **UPS Shutdown Delay** come from the values you provided on the **Device >> Management >> Reaction** page. For more information, see “Using the Device >> Management >> Reaction Page” on page [58](#).

The screenshot shows the 'MIDDLE ATLANTIC UPS RackLink™' web interface. The breadcrumb trail is 'Device » Management » Control'. The 'Control' section is active, showing a 'Smart Shutdown' configuration page. It includes a 'Select UPS Control' dropdown menu with options: 'Battery Test', 'Shutdown & Restart UPS Only', 'Smart Shutdown', 'Outlet Control', and 'Power Fail/Restore Simulation'. The 'Smart Shutdown' option is selected. Below the dropdown, there are two delay settings: 'Estimated OS Shutdown Delay: 300 Seconds' and 'UPS Shutdown Delay: 60 Seconds'. A 'Start Smart Shutdown' button is visible. A description at the bottom states: 'Description: The Smart Shutdown mechanism is used to shutdown all of the connected computers and the UPS safely by one click. First of all you should estimate the longest OS Shutdown Delay time of your operating systems, which have the shutdown software installed and are connected to this card. The card will delay the assigned OS Shutdown Delay time to wait for all of the OSes to shutdown and then send the UPS Shutdown Delay time to turn off the UPS.'

When downloading and installing the Shutdown Software onto PCs on the same network as your card, the Shutdown Agent can properly close the operating system on the computer before turning off any corresponding outlets or banks.



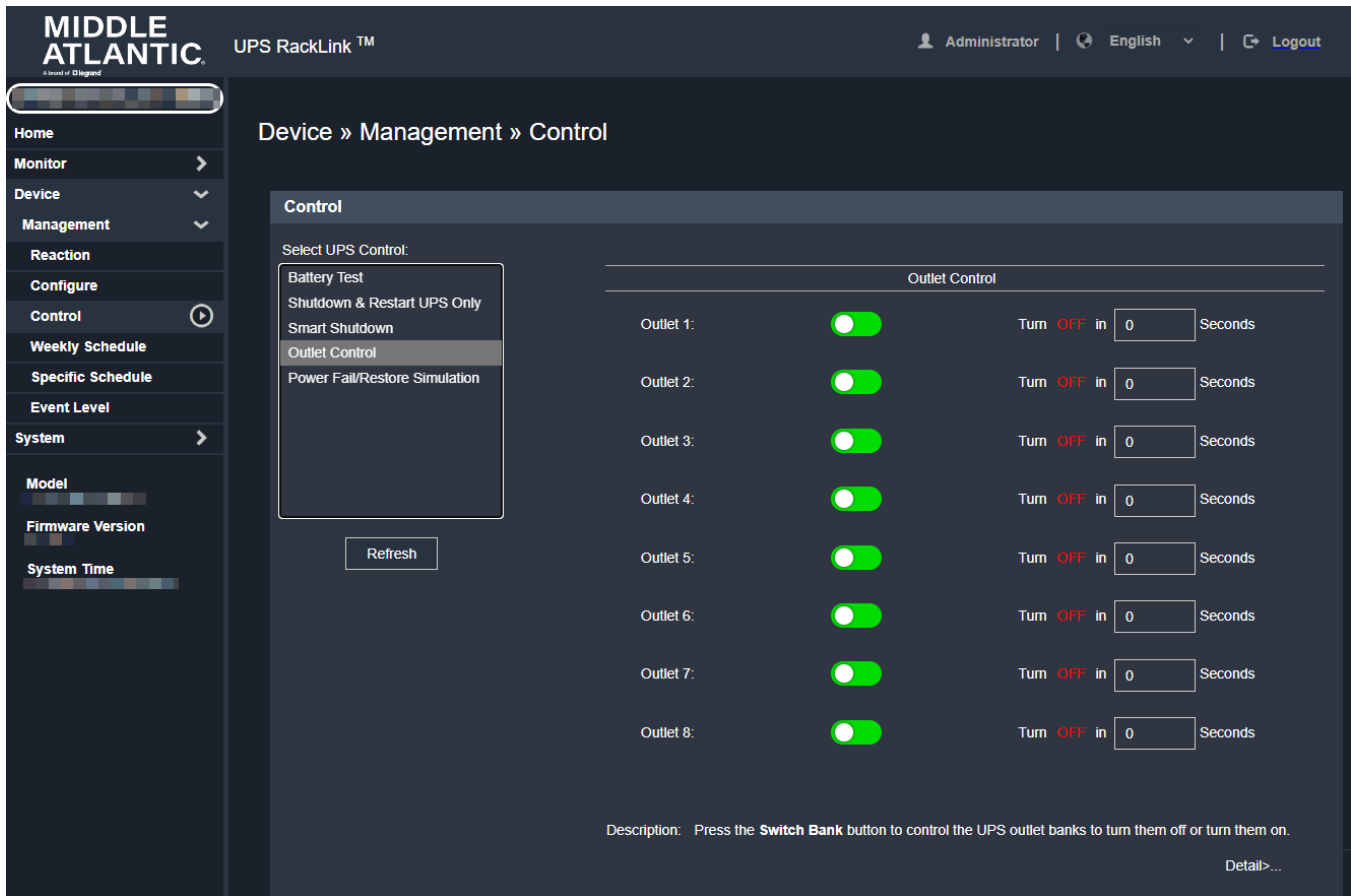
NOTE


The shutdown software must be installed on all workstations connected to your network card to initiate and complete operating system shutdown.

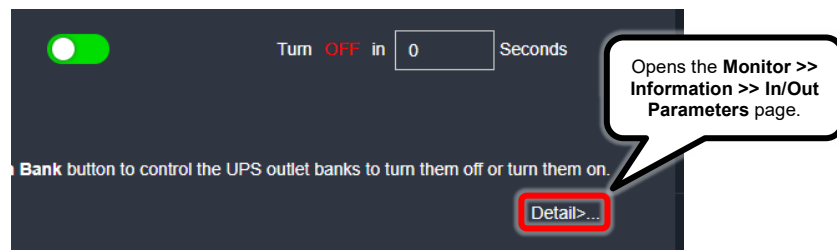
For more information, download the Shutdown Software at <https://www.legrandav.com/resources/power-downloads> and refer to the Shutdown Software User Manual (100-00091) at www.legrandav.com.

• **Outlet Control (Depending on the Outlet or Bank UPS Model You Purchased)**


- **Outlet Control:** For Outlet UPS models, rows 1 – 8 on this page represent outlets 1 – 8 on your UPS. Enter a corresponding delay time (in seconds), if desired, and use the outlet switch buttons to turn outlets ON or OFF.

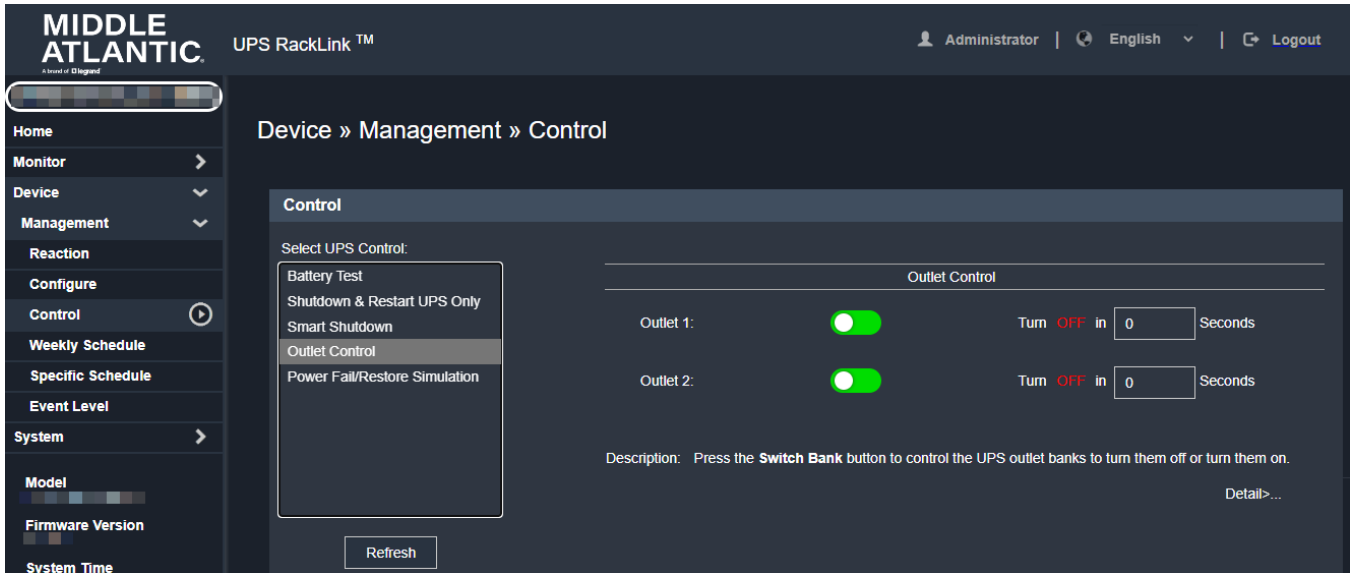



 **TIP** Click the Detail shortcut to access the **Monitor >> Information >> In/Out Parameters** page.

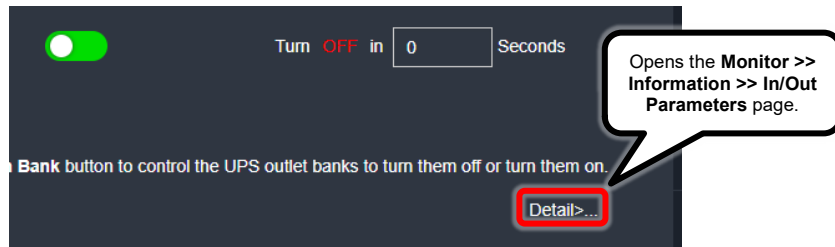


- **Bank Control:** For Bank UPS models, rows 1 and 2 on this page represent the 2 separate banks of outlets 1 – 4 and 5 - 8 on your UPS. Enter a corresponding delay time (in seconds), if desired, and use the outlet switch buttons to turn banks ON or OFF.


 **NOTE** The word "outlet" on this page refers to the bank of outlets on your Bank model UPS.



 **TIP** Click the Detail shortcut to access the **Monitor >> Information >> In/Out Parameters** page.




- Power Fail/Restore Simulation:** Select to click either the **Power Fail Test** or **Power Restore Test** button and simulate the event on your UPS. Use this function to test all the connected software. Power fail or restore tests do not affect UPS operations and the UPS remains in its original operation mode and doesn't transfer into battery mode.

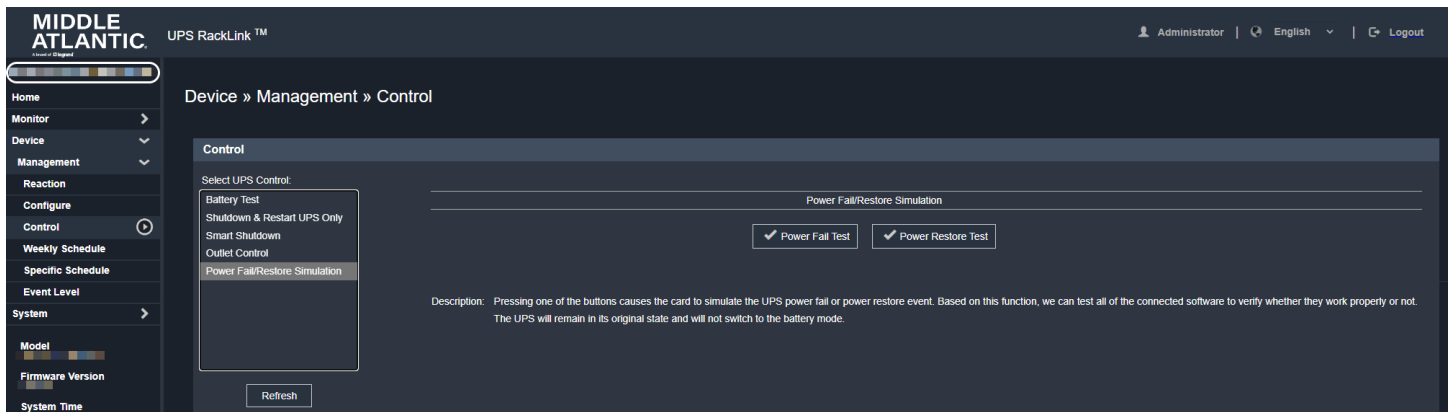


NOTE

- Simulations do not affect actual UPS operations. When running a simulation, your UPS remains in the original operation mode and will not transfer to battery mode due to simulation events.
- Simulations also do not trigger Smart Shutdown operations.



TIP Use the Control page to trigger a Smart Shutdown and test your settings. For more information, see "Using the Device >> Management >> Control Page" on page [65](#).




Using the Device >> Management >> Weekly Schedule Page

Click **Device >> Management >> Weekly Schedule** to configure a weekly schedule for selected UPS actions.

Select from the Action drop-down, mark days of the week and provide a scheduled start time for any of the 12 rows of weekly schedules. Available actions on each weekly schedule drop-down differs slightly for Outlet and Bank UPS models as follows:

- Outlet UPS Models:** Available actions include No Action, Shutdown, Restart, 10-Second Test, Shutdown Bank 1, Restart Bank 1, Shutdown Bank 2, Restart Bank 2, Shutdown Bank 3, Restart Bank 3, Shutdown Bank 4, Restart Bank 4, Shutdown Bank 5, Restart Bank 5, Shutdown Bank 6, Restart Bank 6, Shutdown Bank 7, Restart Bank 7, Shutdown Bank 8, and Restart Bank 8.



NOTE The word "bank" on this drop-down refers to each outlet on your Outlet model UPS.

MIDDLE ATLANTIC UPS RackLink™

Administrator | English | Logout

Device » Management » Weekly Schedule

Weekly Schedule	Action	SUN	MON	TUE	WED	THR	FRI	SAT	Time
1	No Action								00:00 AM
2	No Action								00:00 AM
3	No Action								00:00 AM
4	No Action								00:00 AM
5	No Action								00:00 AM
6	No Action								00:00 AM
7	No Action								00:00 AM
8	No Action								00:00 AM
9	No Action								00:00 AM
10	No Action								00:00 AM
11	No Action								00:00 AM
12	No Action								00:00 AM


Submit

- **Bank UPS Models:** Available actions include No Action, Shutdown, Restart, 10-Second Test, Shutdown Bank 1, Restart Bank 1, Shutdown Bank 2, and Restart Bank 2.

Device » Management » Weekly Schedule

Weekly Schedule

Action	SUN	MON	TUE	WED	THR	FRI	SAT	Time	
	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	00:00
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	00:00	AM
3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	00:00	AM
4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	00:00	AM
5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	00:00	AM
6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	00:00	AM
7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	00:00	AM
8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	00:00	AM
9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	00:00	AM
10	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	00:00	AM
11	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	00:00	AM
12	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	00:00	AM


 **NOTE** Execute a complete power cycle on devices connected to your UPS by configuring a shutdown on the corresponding outlet or bank first, and then a restart.

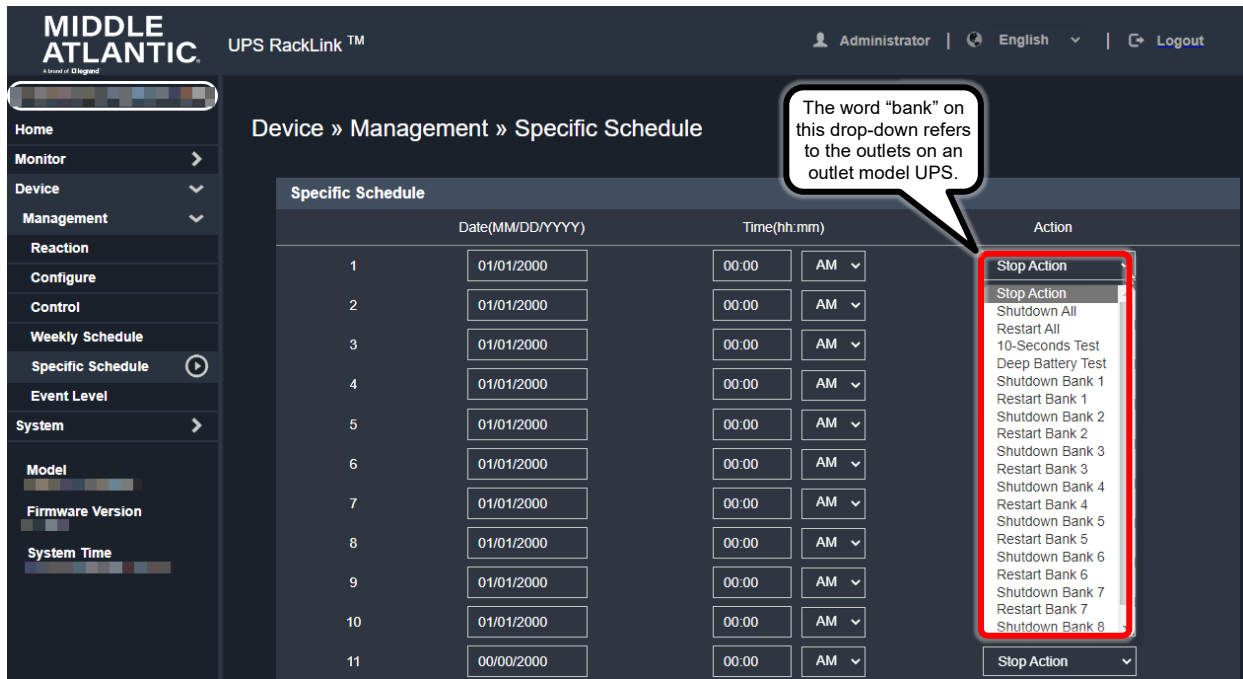
Using the Device >> Management >> Specific Schedule Page

Click **Device >> Management >> Specific Schedule** to configure a specific schedule for selected UPS operations.

Provide a Date, Time, and select from the Action drop-down for any of the 20 rows of specific schedules. Available actions on each specific schedule drop-down differs slightly for Outlet and Bank UPS models as follows:

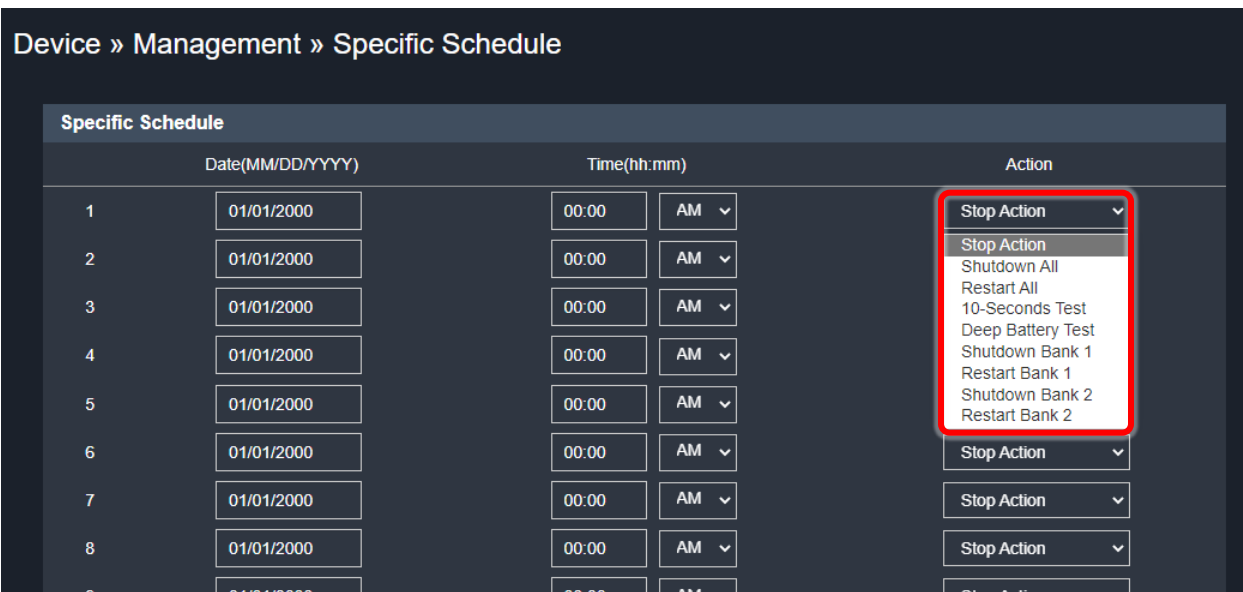
- **Outlet UPS Models:** Available actions include Stop Action, Shutdown All, Restart All, 10-Second Test, Deep Battery Test, Shutdown Bank 1, Restart Bank 1, Shutdown Bank 2, Restart Bank 2, Shutdown Bank 3, Restart Bank 3, Shutdown Bank 4, Restart Bank 4, Shutdown Bank 5, Restart Bank 5, Shutdown Bank 6, Restart Bank 6, Shutdown Bank 7, Restart Bank 7, Shutdown Bank 8, and Restart Bank 8.

 **NOTE** The word "bank" on this drop-down refers to each outlet on your Outlet model UPS.




The screenshot shows the 'MIDDLE ATLANTIC UPS RackLink™' web interface. The navigation menu on the left includes Home, Monitor, Device, Management, Reaction, Configure, Control, Weekly Schedule, Specific Schedule (selected), Event Level, System, Model, Firmware Version, and System Time. The main content area is titled 'Device » Management » Specific Schedule'. It features a table with columns for 'Date(MM/DD/YYYY)', 'Time(hh:mm)', and 'Action'. The table contains 11 rows. The 'Action' column for each row has a dropdown menu. A callout box points to the dropdown menu for row 1, which is open and shows a list of actions: Stop Action, Shutdown All, Restart All, 10-Seconds Test, Deep Battery Test, Shutdown Bank 1, Restart Bank 1, Shutdown Bank 2, Restart Bank 2, Shutdown Bank 3, Restart Bank 3, Shutdown Bank 4, Restart Bank 4, Shutdown Bank 5, Restart Bank 5, Shutdown Bank 6, Restart Bank 6, Shutdown Bank 7, Restart Bank 7, and Shutdown Bank 8. The 'Stop Action' option is highlighted at the top of the list.

- **Bank UPS Models:** Available actions include Stop Action, Shutdown All, Restart All, 10-Second Test, Deep Battery Test, Shutdown Bank 1, Restart Bank 1, Shutdown Bank 2, and Restart Bank 2.



This is a close-up view of the 'Specific Schedule' table. The table has three columns: 'Date(MM/DD/YYYY)', 'Time(hh:mm)', and 'Action'. The first row (index 1) has a date of '01/01/2000', a time of '00:00', and an 'AM' period. The 'Action' dropdown menu is open, showing a list of actions: Stop Action, Shutdown All, Restart All, 10-Seconds Test, Deep Battery Test, Shutdown Bank 1, Restart Bank 1, Shutdown Bank 2, and Restart Bank 2. The 'Stop Action' option is highlighted at the top of the list.

 **NOTE** Execute a complete power cycle on devices connected to your UPS by configuring a shutdown on the corresponding outlet or bank first, and then a restart.

Using the Device >> Management >> Event Level Page

Click **Device >> Management >> Event Level** to configure a level for an event.

1. Select a specific event by clicking the specific row you wish to modify.



NOTE Any of the 12 event levels are updated one at a time.

2. With the desired event row selected, use the **Level** drop-down to select a new level for the corresponding event.
3. Click **Update**.

The screenshot shows the 'Event Level' configuration page in the UPS RackLink web interface. The page title is 'Device » Management » Event Level'. A table lists events with their current levels. The event 'Output abnormal' (row 5) is selected, and its level dropdown menu is open, showing options: Alarm, None, Information, Warning, Alarm. Callouts indicate: 'Click the event level row you wish to modify from the list on the lower part of the screen.' pointing to row 5; 'Select your desired level from the drop-down.' pointing to the dropdown menu; and 'Click update.' pointing to the 'Update' button.

	Event Description	Level
1	UPS temperature out of range	Warning
2	UPS temperature back to normal	Alarm
3	Power failure	Warning
4	Power restored	Warning
5	Output abnormal	Alarm
6	Recover from output abnormal	Alarm
7	Overload	Alarm

To configure email notifications for events, see “Using the System >> Notification >> SNMP Trap Page” on page [93](#) and “Using the System >> Notification >> Mail Server Page” on page [96](#).


Configuring System Settings



NOTE Only the Administrator account can view and access the System pages.

Configuring and controlling your UPS is done using the System pages. Corresponding pages are divided into Administration and Notification sections to view and/or modify various settings. The following topics provide more detail about each System page.

Using System >> Administration Pages



NOTE
 Only the Administrator account can view and access the System pages.

The **System >> Administration** section includes pages for configuring User Manager, TCP/IP, Web, Console, FTP, Time Server, Syslog, Batch Configuration, and Upgrade settings.

Using the System >> Administration >> User Manager Page

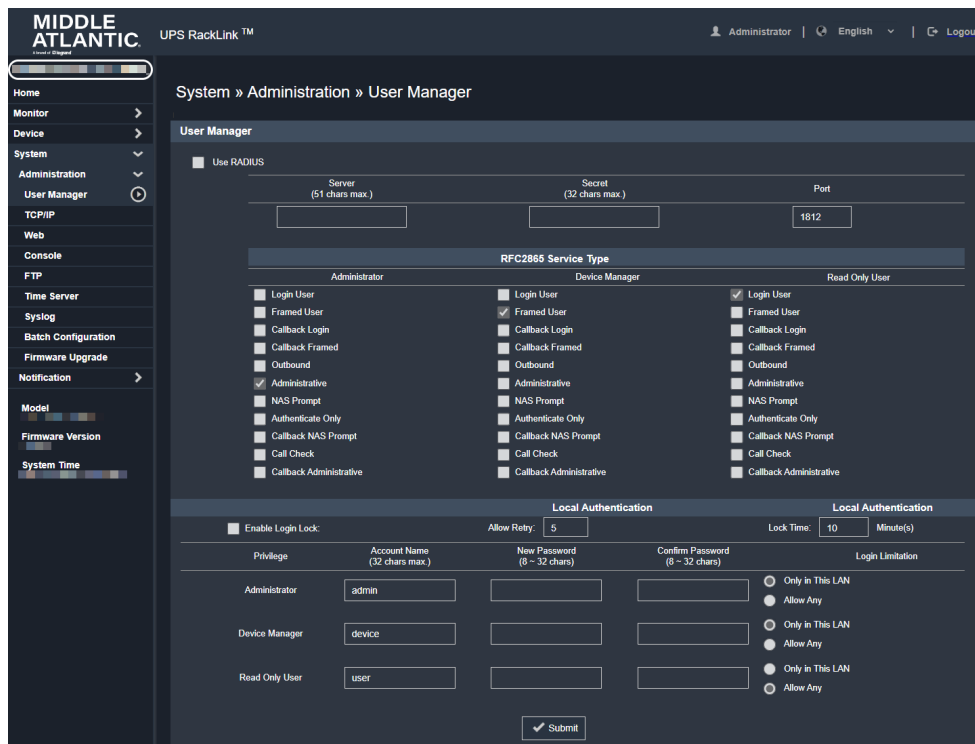
Modify the following settings as desired and click **Submit** to apply the changes onto your UPS.

1. Enable RADIUS by marking the **Use RADIUS** check box, providing Server, Secret, and Port (default: 1812) values.
2. Use RFC 2865 Service Types section of the screen and mark corresponding check boxes to apply specific services to Administrator, Device Manager, and Read Only user accounts as desired.
3. Use the Local Authentication section of the screen to mark or clear the **Enable Login Lock** check box and specify a number of login attempts in **Allow Retry**, and a number (in minutes) for the **Lock Time**, as desired.


NOTE

- The same Local Authentication configurations for login lock, retries, and lock time apply to all three accounts (Administrator, Device Manager, and User).
- Local Authentication configurations still apply even if RADIUS is disabled.

4. Use fields for each of the three accounts to change the **Account Name**, **New Password**, **Confirm Password**, and select a Login Limitation as **Only in This LAN** or **Allow Any**, as desired.



Using the System >> Administration >> TCP/IP Page



NOTE

- Only the Administrator account can view and access the System pages.
- If you have multiple UPS network cards installed on your network, you can avoid issues by changing the default Host Name, disabling BOOTP/DHCP, and manually assigning a static IP address on each card.

Use the TCP/IP page to configure local network parameters for the network card.

Configuring TCP/ IP Settings for IPv4

In the TCP/IP Settings for IPv4 section of the page, provide information for the following (if applicable) and click **Submit** to apply changes onto your UPS:

- **DHCP Client:** Select the Enable or Disable radio button as desired. When enabled, the DHCP server

automatically assigns an IP address to the network card.

- **IP Address:** Displays your network card IPv4 address. You can only modify the address when DHCP is disabled.
- **Subnet Mask:** Displays the subnet mask for your network.
- **Gateway IP:** Displays the network gateway IP address.
- **DNS IP:** Displays the domain name server IP address.
- **Search Domain:** Displays the search domain. If the Host Name you provided cannot be found, the system appends the search domain to your Host Name.



REMINDER

If the host name you provided on the System section of the screen cannot be found, the system adds the search domain to the entire URL.

Configuring TCP/IP Settings for IPv6

In the TCP/IP Settings for IPv6 section of the page, provide information for the following (if applicable) and click **Submit** to apply changes onto your UPS:

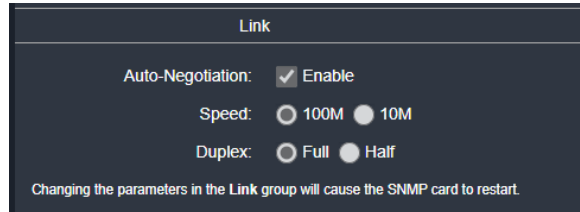
- **DHCP Client:** Select the Enable or Disable radio button as desired. When enabled, the DHCP server automatically assigns an IP address to the network card.
- **IP Address:** Displays your network card IPv6 address. You can only modify the address when DHCP is disabled.
- **Subnet Mask:** Displays the subnet mask for your network.
- **Gateway V6IP:** Displays the network gateway V6IP address.
- **DNS V6IP:** Displays the domain name server V6IP address.

Configuring TCP/IP System Settings

In the System section of the page, provide information for the following (if applicable) and click **Submit** to apply changes onto your UPS:

- **Host Name:** Displays your existing network card host name which may be modified, if desired.
- **System Contact:** Displays your system contact information which may be modified, if desired.
- **System Location:** Displays your system location information which may be modified, if desired.


Configuring TCP/IP Link Settings



In the Link section of the page, provide information for the following (if applicable) and click **Submit** to apply changes onto your UPS:

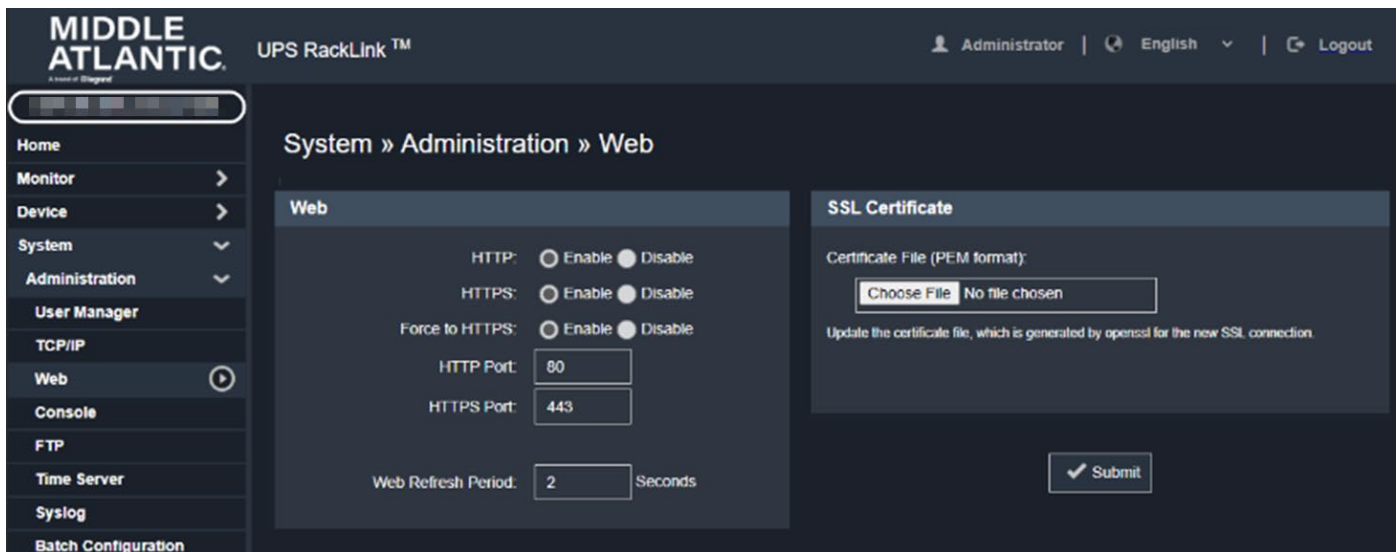
- **Auto-Negotiation:** Mark the Auto-Negotiation Enable check box to activate an automatic transfer rate negotiation (100M/10M).
- **Speed:** If the Auto-Negotiation Enable check box is cleared, use the Speed radio button to select either 100M or 10M, as desired.
- **Duplex:** If the Auto-Negotiation Enable check box is cleared, use the Duplex radio button to select either Full or Half duplex, as desired.

Using the System >> Administration >> Web Page



NOTE Only the Administrator account can view and access the System pages.

Use the Web page to enable or disable the HTTP and HTTPS communication protocols and/or configure an SSL (PEM) certificate.



Configuring Web (HTTP/HTTPS) Settings

The screenshot shows the 'Web' configuration page in the UPS RackLink web interface. The page is titled 'System » Administration » Web'. On the left is a navigation menu with options: Home, Monitor, Device, System, Administration, User Manager, TCP/IP, Web (selected), Console, FTP, Time Server, Syslog, and Batch Configuration. The main content area is divided into two sections: 'Web' and 'SSL Certificate'. The 'Web' section contains the following settings:

- HTTP: Enable Disable
- HTTPS: Enable Disable
- Force to HTTPS: Enable Disable
- HTTP Port:
- HTTPS Port:
- Web Refresh Period: Seconds

The 'SSL Certificate' section contains the following settings:

- Certificate File (PEM format): No file chosen
- Update the certificate file, which is generated by openssl for the new SSL connection.
-

In the Web section of the page, provide HTTP, HTTPS, Port, and Refresh values as follows and click **Submit** to apply changes onto your UPS:

- **HTTP:** Use this radio button to enable or disable the HTTP connection.
- **HTTPS:** Use this radio button to enable or disable the HTTPS connection.
- **Force to HTTPS:** Use this radio button to enable or disable exclusive web access through the HTTPS connection.
- **HTTP Port:** Use this field to specify an HTTP port number. The default number is 80.
- **HTTPS Port:** Use this field to specify an HTTPS port number. The default number is 443.
- **Web Refresh Period:** Use this field to specify the web refresh interval (in seconds). The default setting is 2 seconds.

Configuring an SSL Certificate

To ensure a secure connection between your network card and connected workstations, you may configure an SSL certificate to encrypt and secure the data.

In the SSL Certificate section of the page, click **Choose File** to upload a certificate file onto your network card, if desired and click **Submit** to apply changes onto your UPS. The network card supports certificates in the PEM format generated by OpenSSL.

For more information about generating a private SSL certificate file, see “Troubleshooting” on page [107](#) or visit <http://www.openssl.org>.

Using the System >> Administration >> Console Page



NOTE

Only the Administrator account can view and access the System pages.

This page allows the Administrator to enable or disable Telnet/SSH communication protocols and upload host and authentication public keys using the web interface.

The Console connections (Telnet and SSH/SFTP) just have passwords and are enabled or disabled over respective ports, while the Host and Authentication Keys are used for specifically encrypting those respective internet protocol connections.

Enabling and Specifying Console Ports

Use the Console section of the page to enable and specify ports numbers as needed.

The screenshot shows the web interface for configuring the console. The breadcrumb trail is 'System » Administration » Console'. The 'Console' section includes:

- Telnet: Enable Disable
- SSH/SFTP: Enable Disable
- Telnet Port:
- SSH Port:

The 'Host Key' section includes:

- DSA Key: No file chosen
- RSA Key: No file chosen

The 'Authentication Public Key' section includes:

- Public Key: No file chosen

A 'Submit' button is located at the bottom right of the form.

- **Telnet:** Use the radio button to Enable or Disable Telnet protocol connections. Telnet connections are disabled by default.
- **SSH/SFTP:** Use the radio button to Enable or Disable SSH/SFTP connections. SSH/SFTP connections are enabled by default.
- **Telnet Port:** Specify the Telnet protocol connection port number. The default number is 23.
- **SSH Port:** Specify the SSH protocol port number. The default number is 22.

Configuring the Host and Authentication Public Keys

These sections of the screen allow upload your own SSH keys for specifically encrypting those respective internet protocol connections. The UPS RackLink supports key files generated by OpenSSH, including DSA, RSA, and Authentication Public Keys.

For information about generating DSA, RSA, and Authentication Public keys for SSH, see “How do I generate DSA, RSA, and Public keys for SSH?” in the Troubleshooting section on page [111](#).

Using the System >> Administration >> FTP Page

**NOTE**

Only the Administrator account can view and access the System pages.

Configuring FTP

1. Click **System >> Administration >> FTP** on the navigation menu.

The FTP page appears.

The screenshot shows the web interface for configuring FTP. The breadcrumb navigation is 'System » Administration » FTP'. The 'FTP' section has two radio buttons: 'Enable' (selected) and 'Disable'. Below it is a text box for 'FTP Port' with the value '21'. A 'Submit' button is at the bottom.

1. Use the **FTP** radio button to Enable or Disable FTP connections. FTP connections are disabled by default.
2. Use the **FTP Port** text box to specify the port number. The default number is 21.
3. Click the **Submit** button to apply changes to your UPS.

Using the System >> Administration >> Time Server Page



NOTE

Only the Administrator account can view and access the System pages.

The System Time radio button options allow you to choose between configuring automatic time synchronization using specified SNTP servers or manually setting the date and time using the Local PC or actual field entries.



CAUTION

Both event and data log files are not processed if SNTP is selected from the System Time radio button option and the primary and secondary time servers specified are unresponsive.

Configuring the Simple Network Time Server

The System Time radio button options allow you to choose between configuring automatic time synchronization using specified SNTP servers or manually setting the date and time using the Local PC or actual field entries.




CAUTION

Both event and data log files are not processed if SNTP is selected from the System Time radio button option and the primary and secondary time servers specified are unresponsive.


1. Click **System >> Administration >> Time Server** on the navigation menu.

The Time Server page appears.

2. Select **SNTP** from the System Time radio button.



CAUTION Both event and data log files are not processed if SNTP is selected from the System Time radio button option and the primary and secondary time servers specified are unresponsive.




NOTE Selecting SNTP disables the fields on the Manual section of the page and enables fields on the Simple Network Time Server section.

3. Modify simple network time server settings as desired and click **Submit** to apply the changes onto your UPS.

- **Time Zone:** From the dropdown menu, select the time zone for the location where the UPS RackLink is located.
- **Primary and Secondary Time Server:** Two-time servers can be added. Every 60 minutes, the UPS RackLink synchronizes with the first responding server.
- **Enable Daylight Saving:** Check to enable daylight saving time and provide From and To date range values as desired. During this time period, the UPS RackLink adjusts the time forward by one hour.

Configuring the System Time Manually

You can manually set date and time.



NOTE Every time the network card is rebooted, or factory reset, the system reinstates the day and time to the original factory settings.

1. Click **System >> Administration >> Time Server** on the navigation menu.

The Time Server page appears.

2. Select **Manual** from the System Time radio button.



NOTE

Selecting Manual disables the fields on the Simple Network Time Server section of the page and enables fields on the Manual section.

3. Set the current time fields as desired and click **Submit** to apply the changes onto your UPS.

- **Refer to Local PC Time:** Mark the Refer to Local PC Time check box to use the system time settings from the PC connected to your UPS.



NOTE

When the Refer to Local PC Time check box is selected, the Date and Time field values are automatically provided by the system time from the PC connected to your UPS and cannot be modified.

OR...

- **Refer to Local PC Time:** Clear the Refer to Local PC Time check box and provide specific **Date** and **Time** values (in MM/DD/YYYY and hh:mm:ss formats, respectively) as desired.

Using the System >> Administration >> Syslog Page



NOTE

- Only the Administrator account can view and access the System pages.
- Syslog records do not affect local event log entries.

Configuring Syslog Servers

1. Click **System >> Administration >> Syslog** on the navigation menu.

The Syslog page appears.

The screenshot shows the web interface for configuring Syslog servers. The breadcrumb path is "System » Administration » Syslog". The main content area is titled "Syslog" and contains the following elements:

- A "Syslog:" label followed by two radio buttons: "Enable" (selected) and "Disable".
- Four text input fields labeled "Syslog Server 1:", "Syslog Server 2:", "Syslog Server 3:", and "Syslog Server 4:".
- A "Submit" button with a checkmark icon.

The left-hand navigation menu includes items such as Home, Monitor, Device, System, Administration, User Manager, TCP/IP, Web, Console, FTP, Time Server, Syslog (highlighted), and Batch Configuration.

2. Select **Enable** or **Disable** as desired from the Syslog radio button.
3. Specify up to four remote Syslog server IP addresses of your choosing in the corresponding text boxes for log storage and analysis.
4. Click **Submit**.

Using the System >> Administration >> Batch Configuration Page

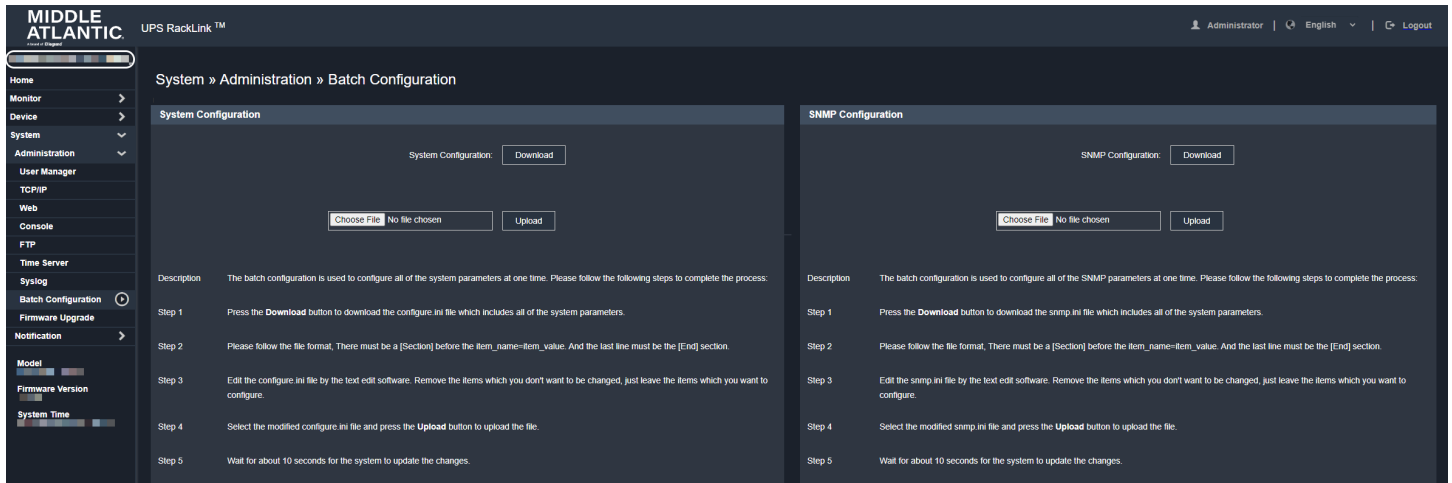


NOTE


- Only the Administrator account can view and access the System pages.
- When batch configuring, all the UPS devices must each have network cards and be configured onto the same network.

Use batch configuration to replicate the UPS settings from a single setup to multiple UPS devices (each with network cards). This is done by exporting a configuration file from the UPS setup you wish to replicate from, and then downloading and importing it onto a new UPS.

The UPS RackLink provides batch configuration to allow quick and effortless setup on multiple SNMP devices. You can duplicate settings by exporting configuration files from the UPS RackLink that you have successfully configured and import that configuration file on other devices.

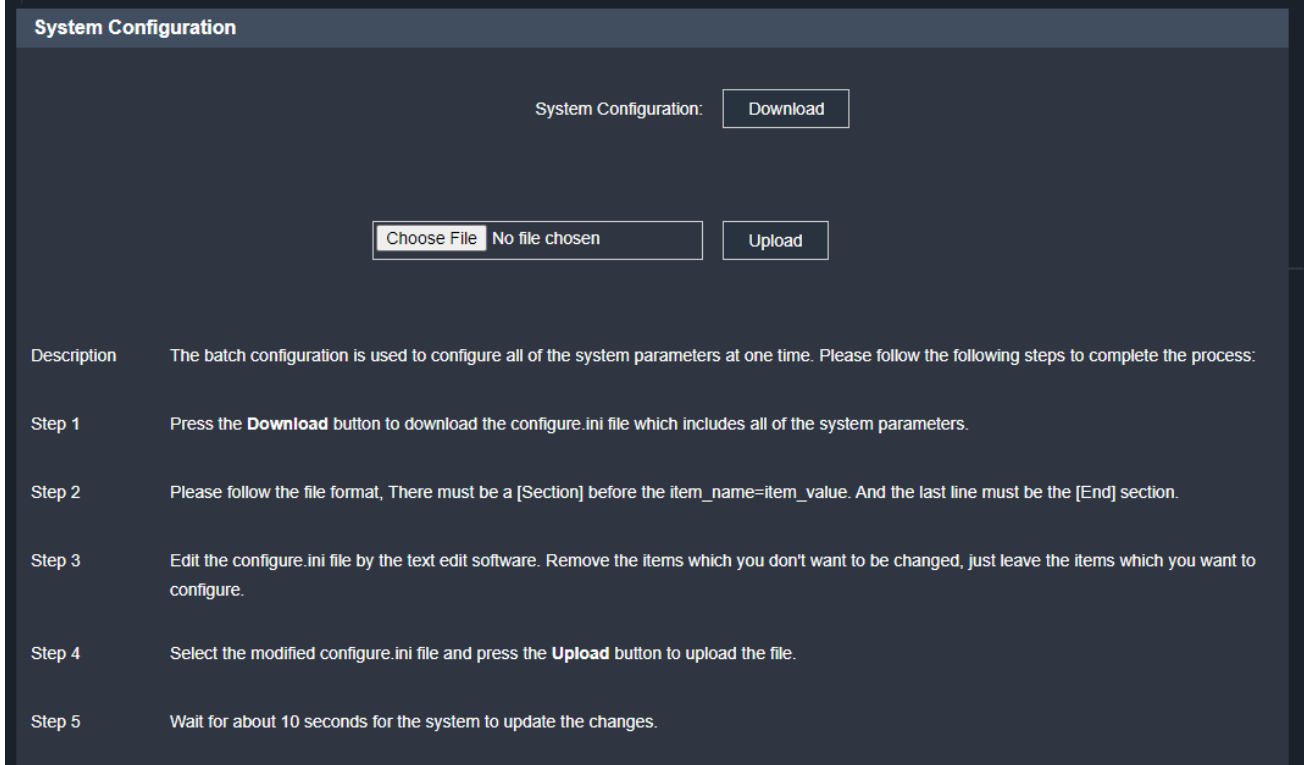


Using Batch System Configurations


NOTE
 System configuration settings include all configurations made on the Device and System pages.

1. Click **System >> Administration >> Batch Configuration** on the navigation menu.

The Batch Configuration page appears.



2. Click **Download** to create a configuration file with all Device and System settings from the UPS.

3. Save the file on your connected workstation, flash drive, or other storage method.
4. On the UPS you wish to apply the system settings, click the **Choose File** button, and select the system configuration file you downloaded during step 1.
5. Click the **Upload** button to apply the system configuration to your UPS.

**NOTE**

If you specified static IP addresses for either IPv4 or IPv6 instead of DHCP on corresponding TCP/IP pages and you wish to copy settings to other devices on the same LAN, you must manually remove the **IP=xxx.xxx.xxx.xxx** line on the System section of the screen before downloading the system configuration file. For more information refer to “Using the System >> Administration >> TCP/IP Page” on page 76. You also can open the system configuration file using a text editor and modify or assign IP addresses before uploading.

Using Batch SNMP Configurations**NOTE**

SNMP configuration settings include all configurations made on the Notification pages.

1. Click **System >> Administration >> Batch Configuration** on the navigation menu.

The Batch Configuration screen appears.

SNMP Configuration	
SNMP Configuration:	<input type="button" value="Download"/>
<input type="button" value="Choose File"/>	No file chosen <input type="button" value="Upload"/>
Description	The batch configuration is used to configure all of the SNMP parameters at one time. Please follow the following steps to complete the process:
Step 1	Press the Download button to download the snmp.ini file which includes all of the system parameters.
Step 2	Please follow the file format, There must be a [Section] before the item_name=item_value. And the last line must be the [End] section.
Step 3	Edit the snmp.ini file by the text edit software. Remove the items which you don't want to be changed, just leave the items which you want to configure.
Step 4	Select the modified snmp.ini file and press the Upload button to upload the file.
Step 5	Wait for about 10 seconds for the system to update the changes.

2. Click **Download** to create a configuration file with all Notification settings from the UPS.
3. Save the file on your connected workstation, flash drive, or other storage method.

4. On the UPS you wish to apply the SNMP settings, click the **Choose File** button, select the SNMP configuration file you downloaded during step 1.
5. Click the **Upload** button to apply the SNMP configuration to your UPS.

Using the System >> Administration >> Firmware Upgrade Page



NOTE Only the Administrator account can view and access the System pages.

Viewing and Upgrading Firmware Versions

1. Download a firmware update file you wish to apply onto a UPS from www.legrandav.com.
2. Save the file on your connected workstation, flash drive, or other storage method.
3. Click **System >> Administration >> Firmware Upgrade** on the navigation menu of the UPS you wish to upgrade.

The Firmware Upgrade screen appears.

The screenshot shows the web interface for a Middle Atlantic UPS RackLink. The top navigation bar includes the logo, the product name 'UPS RackLink™', and user information: 'Administrator', 'English', and a 'Logout' link. A left-hand navigation menu lists various system functions, with 'Firmware Upgrade' highlighted. The main content area is titled 'System » Administration » Firmware Upgrade' and contains a section for 'Network Card Firmware'. This section includes a 'Current Ver.' field, a 'Firmware File:' field with a 'Choose File' button and 'No file chosen' text, and an 'Upload' button. Below this, a 'Description' states that the feature is used to update the SNMP card firmware. Two steps are listed: Step 1 is to select the firmware file and press the Upload button; Step 2 is to wait about 1 minute for the card to reprogram and reboot.

4. Take note of the **Current Ver** field displaying the firmware version currently installed on the UPS.
5. Click the **Choose File** button, select the firmware update file, and click **Upload**.
6. Click the **Upload** button to install the new firmware on your UPS.

The network card takes approximately one minute to apply the upgrade.

Using System >> Notification Pages



NOTE Only the Administrator account can view and access the System pages.

The **System >> Notification** section includes pages for configuring SNMP Access, SNMPv3 USM, SNMP Trap, Mail Server, and Wake On LAN settings.

Using the System >> Notification >> SNMP Access Page

Your network card supports the SNMP protocol and SNMP NMS (Network Management System) used for network devices monitoring based on conditions calling for administrative attention.

MIDDLE ATLANTIC UPS RackLink™

Administrator | English | Logout

System » Notification » SNMP Access

SNMP Access

Port Configuration MIB

SNMP Server Port:

Download MIB: [UPSv4](#) [UPSv5](#) [Sensor](#) [RFC1628](#)

NMS List

Allowed NMS IP: NMS IP address 0.0.0.0 will allow the SNMP packets to be received from any host.

Community String:

Access Level:

NMS IP	Community	Access Level	
1	<input type="text" value="0.0.0.0"/>	public	Read Only

Configuring SNMP Server Port Settings

1. Click **System >> Notification >> SNMP Access** on the navigation menu.

The SNMP Access page appears.

Port Configuration MIB

SNMP Server Port:

Download MIB: [UPSv4](#) [UPSv5](#) [Sensor](#) [RFC1628](#)

2. Use the **SNMP Server Port** text box to specify the port number.
3. Use corresponding **UPSv4**, **UPSv5**, **Sensor**, and **RFC1628** links to download applicable MIB files, if desired.
4. Click the **Submit** button to apply changes to your UPS.

Adding NMS List Entries

1. Click **System >> Notification >> SNMP Access** on the navigation menu.

The SNMP Access page appears.

NMS List

Allowed NMS IP:

Community String:

Access Level:

NMS IP address 0.0.0.0 will allow the SNMP packets to be received from any host.

NMS IP	Community	Access Level
1	0.0.0.0	public
		Read Only



NOTE

- Prevent unauthorized access by specifying the NMS IP addresses you wish to provide access, their community strings, and access levels. The maximum number of IP entries is 256.
- Entering 0 . 0 . 0 . 0 as the NMS IP disables any access restriction. The network card checks the community string to identify the access level and permission based on these settings.
- As indicated on the interface, enter 0 . 0 . 0 . 0 as the remote IP address to receive SNMP packets from any host.

Enter the following field values for your specific IP address and click **Add** to include it as one of your NMS IP entries.

- **Allowed NMS IP:** Use the text box to specify an IP address you wish to provide SNMP access on your UPS system.
- **Community String:** Use the text box to specify a community string for the IP address.
- **Access Level:** Use the drop-down to select an access level for the IP address.

Updating an NMS IP

1. Click **System >> Notification >> SNMP Access** on the navigation menu.

The SNMP Access page appears.

2. Click the row of the corresponding NMS IP list entry you wish to update.

The field values from the entry then appear in the fields above the list.

3. Modify the fields as desired.
4. Click the **Update** button.

Using the System >> Notification >> SNMPv3 USM (User Session Management) Page

SNMPv3 offers features such as the encryption of packets and authentication to improve security. The SNMPv3 USM (User Session Management) allows you to assign eight users whose access is granted using the SNMPv3 protocol. You can also define their respective Security Levels, Auth Passwords, Priv Passwords and Access Levels.

Use the top portion of the screen to configure Auth Protocol and Context Name settings for all eight available SNMPv3 users.


Configuring Standard SNMPv3 User Settings

Configuring Adding or Editing SNMPv3 Users

1. Click **System >> Notification >> SNMPv3 USM** on the navigation menu.

The SNMPv3 page appears.

2. Enter the following field values on the upper part of the SNMPv3 page as desired and click **Submit** to apply changes to your UPS.

 **NOTE** Selections made on the fields in the upper part of the SNMPv3 page apply to all eight SNMP users.

- Use the **Auth Protocol** drop-down to choose from MD5, SHA1, SHA224, and SHA256 options.
- Use the **Context Name** text box to provide a context name.
- The **Priv Protocol** display field shows the privacy protocol used.

Adding an SNMP User

1. Click **System >> Notification >> SNMPv3 USM** on the navigation menu.

The SNMPv3 page appears.

	User Name (16 bytes max.)	Security Level	Auth Password (>= 8 bytes)	Priv Password (>= 8 bytes)	Access Level
1	<input type="text"/>	noAuth, noPriv	<input type="text"/>	<input type="text"/>	Read Only
2	<input type="text"/>	noAuth, noPriv Auth, noPriv Auth, Priv noAuth, noPriv	<input type="text"/>	<input type="text"/>	Disable Read Only Read/Write Read Only
3	<input type="text"/>	noAuth, noPriv	<input type="text"/>	<input type="text"/>	Read Only
4	<input type="text"/>	noAuth, noPriv	<input type="text"/>	<input type="text"/>	Read Only
5	<input type="text"/>	noAuth, noPriv	<input type="text"/>	<input type="text"/>	Read Only
6	<input type="text"/>	noAuth, noPriv	<input type="text"/>	<input type="text"/>	Read Only
7	<input type="text"/>	noAuth, noPriv	<input type="text"/>	<input type="text"/>	Read Only
8	<input type="text"/>	noAuth, noPriv	<input type="text"/>	<input type="text"/>	Read Only

2. Enter the following field values as desired and click **Submit** to include the values for any of your eight possible users.
 - Use the **User Name** text box to provide a 16 byte/character maximum length user name.
 - Use the **Security Level** drop-down to choose from [noAuth, noPriv], [Auth, noPriv], or [Auth, Priv] security level options for the user.
 - Use the **Auth Password** text box to specify an 8 byte/character maximum length authorization password for the user.
 - Use the **Priv Password** text box to specify an 8 byte/character maximum length privacy password for the user.
 - Use the **Access Level** drop-down to choose from Disable, Read Only, and Read/Write access level options for the user.

Updating Any of the Eight SNMPv3 Users

1. Click **System >> Notification >> SNMPv3 USM** on the navigation menu.

The SNMPv3 page appears.

	User Name (16 bytes max.)	Security Level	Auth Password (>= 8 bytes)	Priv Password (>= 8 bytes)	Access Level
1	<input type="text"/>	noAuth, noPriv	<input type="text"/>	<input type="text"/>	Read Only
2	<input type="text"/>	noAuth, noPriv Auth, noPriv Auth, Priv noAuth, noPriv	<input type="text"/>	<input type="text"/>	Disable Read Only Read/Write Read Only
3	<input type="text"/>	noAuth, noPriv	<input type="text"/>	<input type="text"/>	Read Only
4	<input type="text"/>	noAuth, noPriv	<input type="text"/>	<input type="text"/>	Read Only
5	<input type="text"/>	noAuth, noPriv	<input type="text"/>	<input type="text"/>	Read Only
6	<input type="text"/>	noAuth, noPriv	<input type="text"/>	<input type="text"/>	Read Only
7	<input type="text"/>	noAuth, noPriv	<input type="text"/>	<input type="text"/>	Read Only
8	<input type="text"/>	noAuth, noPriv	<input type="text"/>	<input type="text"/>	Read Only

- Update existing field values for any of the eight users as desired.

For more information, see the previous topic.

- Click the **Submit** button to apply changes to your UPS.

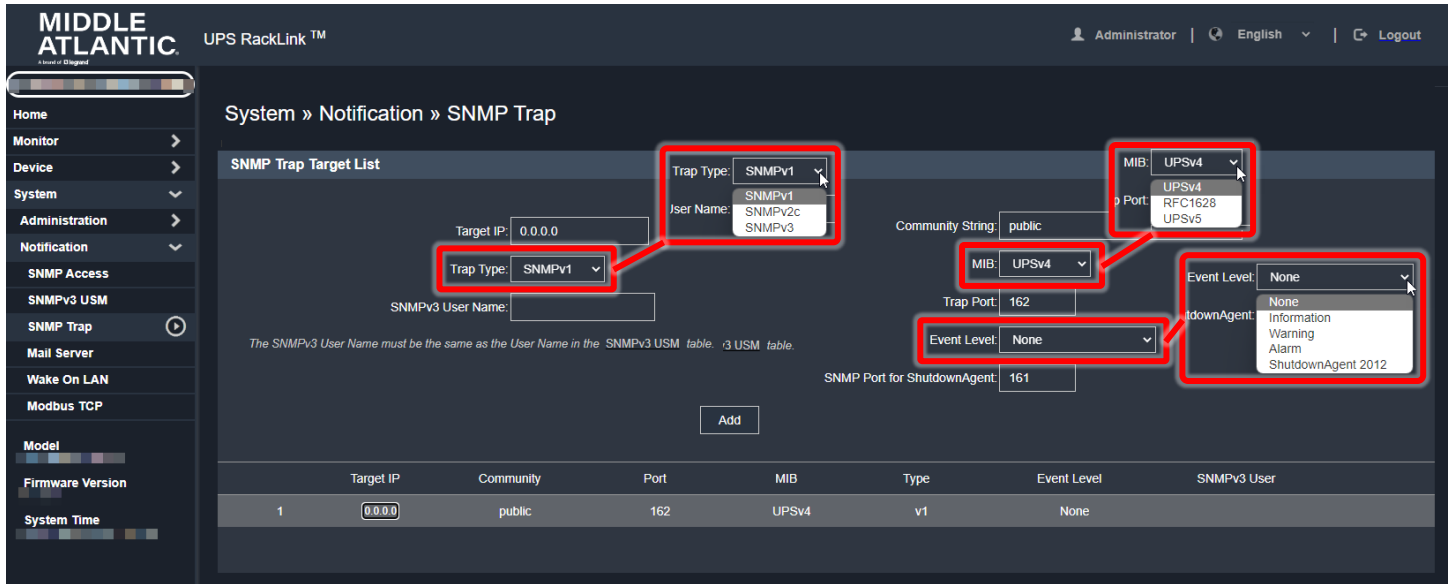
Using the System >> Notification >> SNMP Trap Page

An SNMP trap alerts specific target IP and user names of event occurrences in your monitored environment.

Adding an SNMP Trap Target

- Click **System >> Notification >> SNMP Trap** on the navigation menu.

The SNMP Trap page appears.



2. Enter the following field values as desired and click **Add** to include the trap target to the list below.

NOTE Update, Delete, and Test e-mail buttons only appear on the screen after providing a trap to the list.


- Use the **Target IP** text box to specify an IP address for your trap target.
- Use the **Community String** text box to specify the string for your trap target.
- Use the **Trap Type** drop-down to choose from SNMPv1, SNMPv2, and SNMPv3 access level options for your trap target.

In the case of SNMPv3, use the additional **User Name** field to provide a user name.

NOTE Trap targets on your network card support SNMPv1, SNMPv2, and SNMPv3 for different system environments. If you are using the SNMPv3 type, provide a user name in the SNMPv3 field from the ones entered on the **System >> Notification >> SNMPv3 USM (User Session Management)** page in the previous topic.

- Use the **MIB** drop-down to choose from UPSv4, RFC1628, and UPSv5 access level options for the user.
- Use the **SNMPv3 User Name** text box to specify one of the user names you wish to assign to this target IP and trap from the ones entered on the **System >> Notification >> SNMPv3 USM (User Session Management)** page in the previous topic.
- Use the **Trap Port** text box to specify the port number for your trap target. The default port number is 162.
- Use the **Event Level** drop-down to choose from the following levels and determine what kind of event notifications are sent to the target.
 - **None:** No event notifications are sent to the target.
 - **Information:** All event notifications are sent to the target.


- **Warning:** Both Warning and Alarm event notifications are sent to the target.
- **Alarm:** Only Alarm event notifications are sent to the target.
- **ShutdownAgent:** All event notifications are sent to the target, and you can click **Monitor >> Information >> ShutdownAgent** to review your designated PC’s shutdown information.



NOTE The shutdown software must be installed on all workstations connected to your network card to initiate and complete operating system shutdown.

For more information, download the Shutdown Software at <https://www.legrandav.com/resources/power-downloads> and refer to the Shutdown Software User Manual (100-00091) at www.legrandav.com.

Properly shutting down a PC connected to the same network as your card and running the Shutdown Software includes making configurations on this page along with the Shutdown Software, Reaction, and Control pages. For more information, see “Using the Monitor >> Information >> ShutdownAgent Page,” “Using the Device >> Management >> Reaction Page,” and “Using the Device >> Management >> Control Page” on page 53, 58, and 65, respectively.



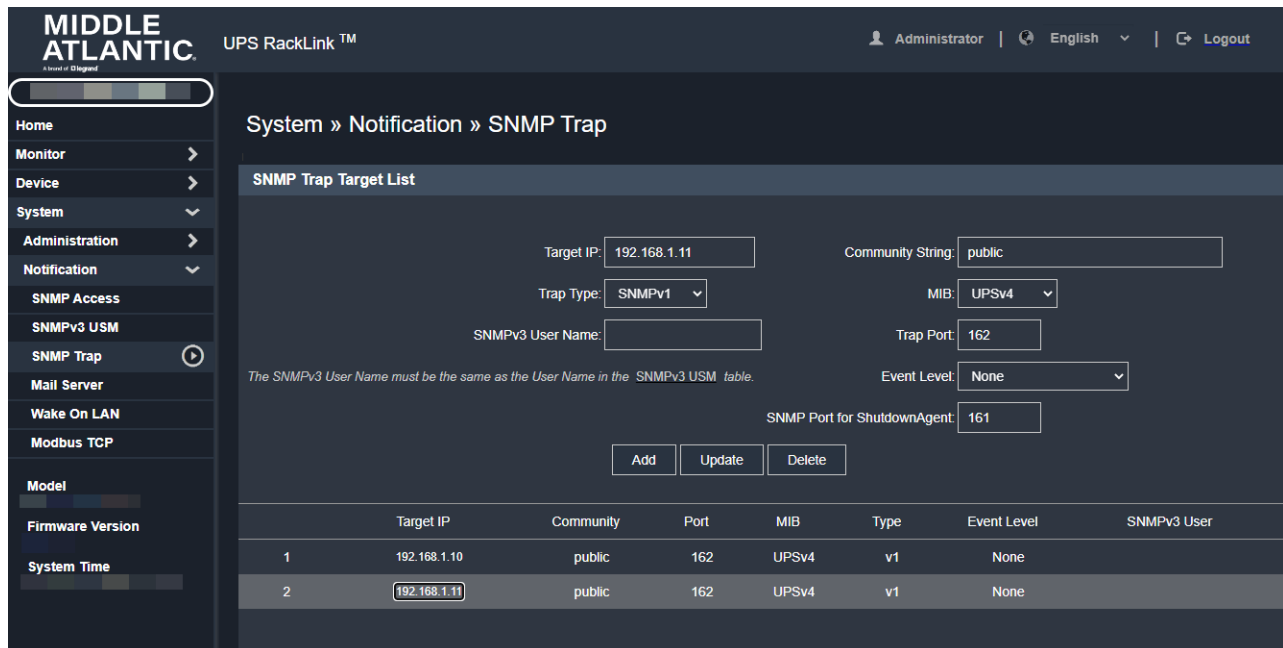
TIP You can modify the assigned levels for specific events, if desired. For more information, see “Using the Device >> Management >> Event Level Page” on page 74.

- Use the **SNMP Port for ShutdownAgent** text box to specify the port number for the ShutdownAgent on your target, if used.

Updating a Trap Target

1. Click **System >> Notification >> SNMP Trap** on the navigation menu.

The SNMP Trap page appears.



The screenshot shows the 'SNMP Trap Target List' configuration page. The form includes the following fields:

- Target IP: 192.168.1.11
- Community String: public
- Trap Type: SNMPv1
- MIB: UPSv4
- SNMPv3 User Name: (empty)
- Trap Port: 162
- Event Level: None
- SNMP Port for ShutdownAgent: 161

Buttons for 'Add', 'Update', and 'Delete' are visible below the form. A note states: "The SNMPv3 User Name must be the same as the User Name in the SNMPv3 USM table."

	Target IP	Community	Port	MIB	Type	Event Level	SNMPv3 User
1	192.168.1.10	public	162	UPSv4	v1	None	
2	192.168.1.11	public	162	UPSv4	v1	None	


2. Click the corresponding row you wish to update.

Respective values for the selected entry appear in the fields above the list.

3. Modify the fields as desired.

For more information, see the previous topic.

4. Click the **Update** button.

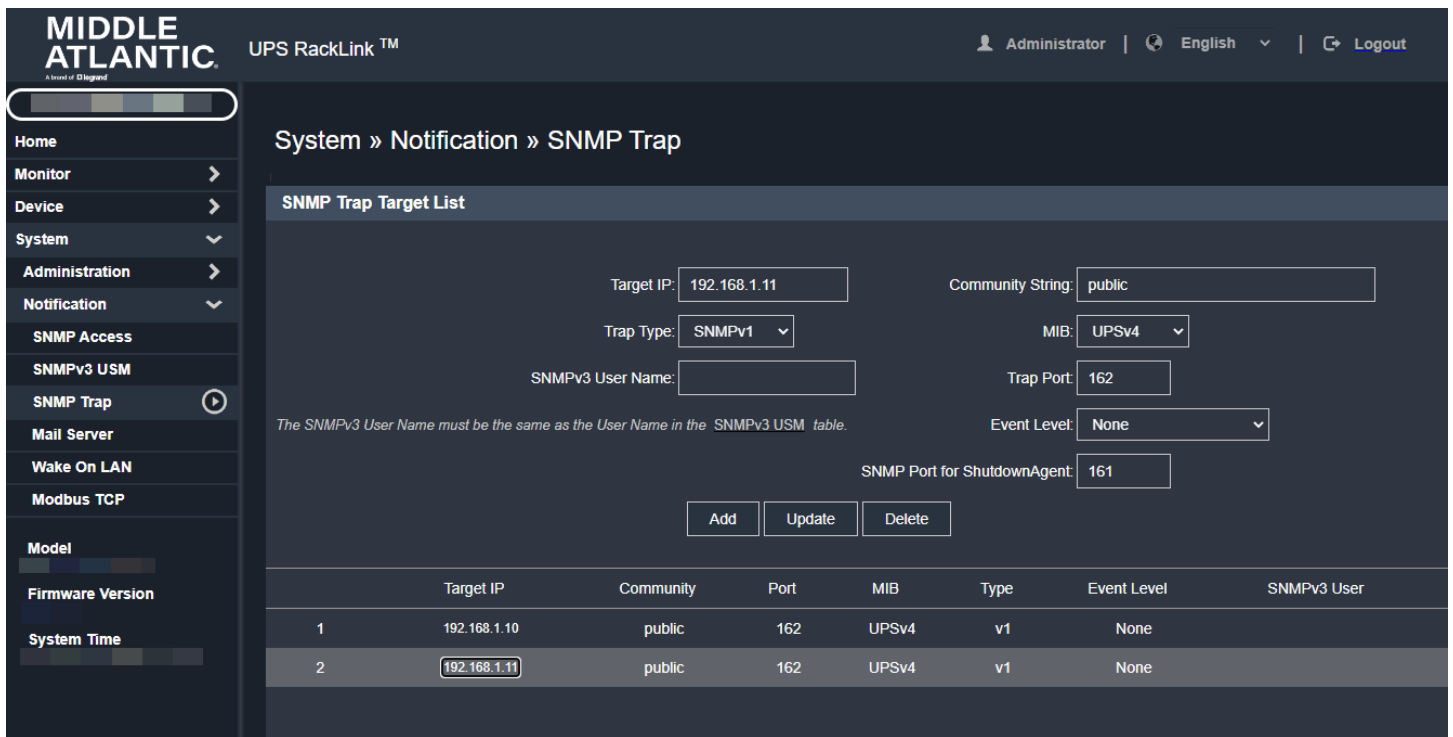


NOTE Update, Delete, and Test e-mail buttons only appear on the screen after providing a trap to the list.

Deleting a Trap Target

1. Click **System >> Notification >> SNMP Trap** on the navigation menu.

The SNMP Trap page appears.



MIDDLE ATLANTIC UPS RackLink™ Administrator | English | Logout

System » Notification » SNMP Trap

SNMP Trap Target List

Target IP: 192.168.1.11 Community String: public

Trap Type: SNMPv1 MIB: UPSv4

SNMPv3 User Name: Trap Port: 162

The SNMPv3 User Name must be the same as the User Name in the 'SNMPv3 USM' table. Event Level: None

SNMP Port for ShutdownAgent: 161


Add Update Delete

	Target IP	Community	Port	MIB	Type	Event Level	SNMPv3 User
1	192.168.1.10	public	162	UPSv4	v1	None	
2	192.168.1.11	public	162	UPSv4	v1	None	

2. Click the corresponding row you wish to update.

Respective values for the selected entry in the fields above the list.

3. Click the **Delete** button.



NOTE Update, Delete, and Test e-mail buttons only appear on the screen after providing a trap to the list.

Using the System >> Notification >> Mail Server Page

This page allows you to configure the SMTP mail server and specify a list of email recipients to receive notifications when events occur. The maximum number of mail list recipients is 256.

Configuring the SMTP Mail Server

1. Click **System >> Notification >> Mail Server** on the navigation menu. The Mail Server page appears.

The screenshot shows the 'Mail Server Configuration' page in the UPS RackLink web interface. The page is titled 'System » Notification » Mail Server'. The configuration section includes the following fields and options:

- SMTP Server Name or IP:** Text box with a note '(51 bytes max.)' and a sub-note 'The Account and Password are not required to send emails.'
- SMTP Server Port:** Text box with the value '25'.
- Account:** Text box with a note '(64 bytes max.)'.
- Account Format:** user_name@mail_server_domain (e.g., john@company.com)
- New Password:** Text box with a note '(32 bytes max.)'
- Enable TLS/SSL:** Checked checkbox.
- Submit:** Button with a checkmark.

Below the configuration section is the 'Mail List' section, which includes:

- Receiver:** Text box.
- Event Level:** Dropdown menu with 'None' selected.
- Daily Event Log:** Unchecked checkbox.
- Daily Data Log:** Unchecked checkbox.
- Add:** Button.
- Test e-mail:** Button.
- Information icon:** Blue circle with an 'i'.
- Table:** A table with columns: Receiver, Event Level, Daily Event Log, and Daily Data Log.

2. Use the **SMTP Server Name or IP** text box to specify the mail server name or IP address. The server name has a 51-byte maximum.



NOTE

If no DNS server is specified in your TCP/IP settings, you must provide an SMTP server address in your server settings to enable the email server notification system.

If a DNS server is not available in the network, you need to manually assign an SMTP server address to enable the email notification system.

3. Use the **SMTP Server Port** text box to specify the port number for your trap target. The default port number is 162.
4. Use the **Account** text box to specify the mail server email account. The mail server email account has a 64-byte maximum.
5. Use the **New Password** text box to provide a mail server password. The mail server password has a 32-byte maximum.
6. Mark the **Enable TLS/SSL** check box to add encryption to the mail server.
7. Click **Submit** to apply the mail server configuration to your network card.

Adding SMTP Email Recipients to the Mail List

1. Click **System >> Notification >> Mail Server** on the navigation menu.

The Mail Server page appears.

The screenshot shows the 'Mail List' configuration page. On the left, there are system status indicators for 'Firmware Version' and 'System Time'. The main area contains a form with the following fields:

- Receiver:** name@company.com
- Event Level:** None (dropdown menu)
- Daily Event Log:**
- Daily Data Log:**

Buttons for 'Add', 'Test e-mail', and a help icon are located below the form. Below the form is a table with the following columns: Receiver, Event Level, Daily Event Log, and Daily Data Log. The table contains one entry:

	Receiver	Event Level	Daily Event Log	Daily Data Log
1	name@company.com	None	No	No

2. Enter the following field values as desired and click **Add** to include the recipient to the list below.



NOTE

Update, Delete, and Test e-mail buttons only appear on the screen after providing a recipient to the mail list.

- Use the **Receiver** text box to specify the email address of the recipient for the SMTP notification.
- Use the **Event Level** drop-down to choose from the following levels that, when triggered, sends the notification to the recipient.
 - Select the **Information** option to send all event level notifications to the recipient.
 - Select the **Warning** option to send both Warning and Alarm event level notifications to the recipient.
 - Select the **Alarm** option to only send Alarm event level notifications to the recipient.
- Mark the **Daily Event Log** check box to include a daily event log file to emails sent to the recipient.
- Mark the **Daily Data Log** check box to include a daily data log file to emails sent to the recipient.

Updating an SMTP Email Recipient

1. Click **System >> Notification >> Mail Server** on the navigation menu.

The Mail Server page appears.

Mail List

Receiver:

Event Level: Information Daily Event Log Daily Data Log

Add
Update
Delete
Test e-mail

	Receiver	Event Level	Daily Event Log	Daily Data Log
1	@hotmail.com	Information	Yes	Yes
2	@gmail.com	Information	Yes	Yes

2. Click the corresponding row of the recipient you wish to update.
Respective values for the selected recipient appear in the fields above the list.
3. Modify the fields as desired.
4. Click the **Update** button.

NOTE Update, Delete, and Test e-mail buttons only appear on the screen after providing a recipient to the mail list.

Deleting an SMTP Email Recipient

1. Click **System >> Notification >> Mail Server** on the navigation menu.

The Mail Server page appears.

Mail List

Receiver:

Event Level: Information Daily Event Log Daily Data Log

Add
Update
Delete
Test e-mail

	Receiver	Event Level	Daily Event Log	Daily Data Log
1	@hotmail.com	Information	Yes	Yes
2	@gmail.com	Information	Yes	Yes

2. Click the corresponding row of the recipient you wish to delete.

Respective values for the selected recipient appear in the fields above the list.

3. Click the **Delete** button.

**NOTE**

Update, Delete, and Test e-mail buttons only appear on the screen after providing a recipient to the mail list.

Testing an SMTP Email Recipient

1. Click **System >> Notification >> Mail Server** on the navigation menu.

The Mail Server page appears.

Mail List

Receiver:

Event Level: Daily Event Log Daily Data Log

	Receiver	Event Level	Daily Event Log	Daily Data Log
1	@hotmail.com	Information	Yes	Yes
2	@gmail.com	Information	Yes	Yes

2. Click the corresponding row of the recipient you wish to test.

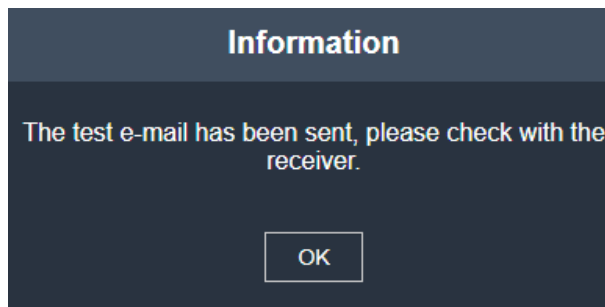
Respective values for the selected recipient appear in the fields above the list.

3. Click the **Test e-mail** button.

**NOTE**

Update, Delete, and Test e-mail buttons only appear on the screen after providing a recipient to the mail list.

An information pop-up appears alerting you that the test email has been sent and to check with the recipient.



4. Click **OK**.

Using the System >> Notification >> Wake On LAN Page

The Wake on Lan function lets you start or wake up PCs connected to the same network as your card using their MAC addresses. You can wake up PCs after restarting your network card or workstation. The maximum number of MAC addresses is 256.

Adding WoL Hosts

1. Click **System >> Notification >> Wake On LAN** on the navigation menu.

The Wake On LAN page appears.

The screenshot shows the 'Wake On LAN' configuration page in the UPS RackLink web interface. The page title is 'System » Notification » Wake On LAN'. On the left is a navigation menu with 'Wake On LAN' selected. The main content area is titled 'WOL Host List'. It contains a form with the following fields:

- Title: None
- MAC (xx-xx-xx-xx-xx-xx): 00-00-00-00-00-00
- Delay: 0 minute(s)
- Wake Up Condition: Power Restore System Startup
- Add button

Below the form is a table with the following data:

	Title	MAC	Delay	Restore	Startup
1	None	00-00-00-00-00-00	0	No	No

2. Enter the following field values as desired and click **Add** to include the WOL Host to the list below.



NOTE Update and Delete buttons only appear on the screen after providing a host to the list.

- Use the **Title** text box to specify a title for your host, if desired.
- Use the **MAC** text box to specify the hosts MAC address.
- Use the **Delay** text box to specify the number of minutes before executing the wake command.
- Mark **Wake Up Condition** check boxes for **Power Restore** or **System Startup**, as desired.

Updating a WoL Host

1. Click **System >> Notification >> Wake On LAN** on the navigation menu.

The Wake On LAN page appears.


The screenshot shows the 'Wake On LAN' configuration page in the UPS RackLink web interface. The page has a dark theme. At the top left is the 'MIDDLE ATLANTIC' logo and 'UPS RackLink™'. At the top right, it shows 'Administrator', 'English', and 'Logout'. A navigation menu on the left lists various system settings, with 'Wake On LAN' highlighted. The main content area is titled 'System » Notification » Wake On LAN' and contains a 'WOL Host List' table. Above the table, there are input fields for 'Title' (Second Test Host), 'MAC (xx-xx-xx-xx-xx-xx)' (70-80-90-80-70-60), and 'Delay' (5 minute(s)). There are also checkboxes for 'Wake Up Condition' with 'Power Restore' selected and 'System Startup' unselected. Below these fields are 'Add', 'Update', and 'Delete' buttons. The table below has columns for Title, MAC, Delay, Restore, and Startup, with two rows of host data.

	Title	MAC	Delay	Restore	Startup
1	Test Host	10-20-30-40-50-60	5	Yes	No
2	Second Test Host	70-80-90-80-70-60	5	Yes	No

2. Click the corresponding row of the host you wish to update.

Respective values for the selected host appear in the fields above the list.

3. Modify the fields as desired.
4. Click the **Update** button.



NOTE Update and Delete buttons only appear on the screen after providing a host to the list.

Deleting a WoL Host

1. Click **System >> Notification >> Wake On LAN** on the navigation menu.

The Wake On LAN page appears.

The screenshot shows the 'Wake On LAN' configuration page in the UPS RackLink web interface. The page title is 'System » Notification » Wake On LAN'. On the left is a navigation menu with options like Home, Monitor, Device, System, Administration, Notification, SNMP Access, SNMPv3 USM, SNMP Trap, Mail Server, Wake On LAN (selected), and Modbus TCP. The main content area is titled 'WOL Host List' and contains a form for adding or editing hosts. The form fields are: Title: Second Test Host; MAC (xx-xx-xx-xx-xx-xx): 70-80-90-80-70-60; Delay: 5 minute(s); Wake Up Condition: Power Restore, System Startup. Below the form are 'Add', 'Update', and 'Delete' buttons. A table below the form lists the configured hosts:

	Title	MAC	Delay	Restore	Startup
1	Test Host	10-20-30-40-50-60	5	Yes	No
2	Second Test Host	70-80-90-80-70-60	5	Yes	No

2. Click the corresponding row of the host you wish to delete.

Respective values for the selected host appear in the fields above the list.

3. Click the **Delete** button.



NOTE Update and Delete buttons only appear on the screen after providing a host to the list.

Using the System >> Notification >> Modbus TCP Page

Your network card includes a Modbus TCP service for UPS monitoring. Specify the slave ID and port based on your monitoring requirements. For added security, you may specify remote IP addresses that are granted or denied system access and configure Disable, Read Only, and Read/Write access levels.

Configuring the Modbus TCP Service

1. Click **System >> Notification >> Modbus TCP** on the navigation menu.

The Modbus TCP page appears.

MIDDLE ATLANTIC UPS RackLink™

Administrator | English | Logout

System » Notification » Modbus TCP

Modbus TCP

Enable Service (8 sessions max.)

Slave ID:

Port:

ModbusTCP Address Table: [ModbusTCP](#)

Remote List

Allowed Remote IP: Remote IP Address 0.0.0.0 will allow the modbus TCP packets to be received from any host.

Access Level:

Remote IP	Access Level
1	<input type="text" value="0.0.0.0"/> Read Only

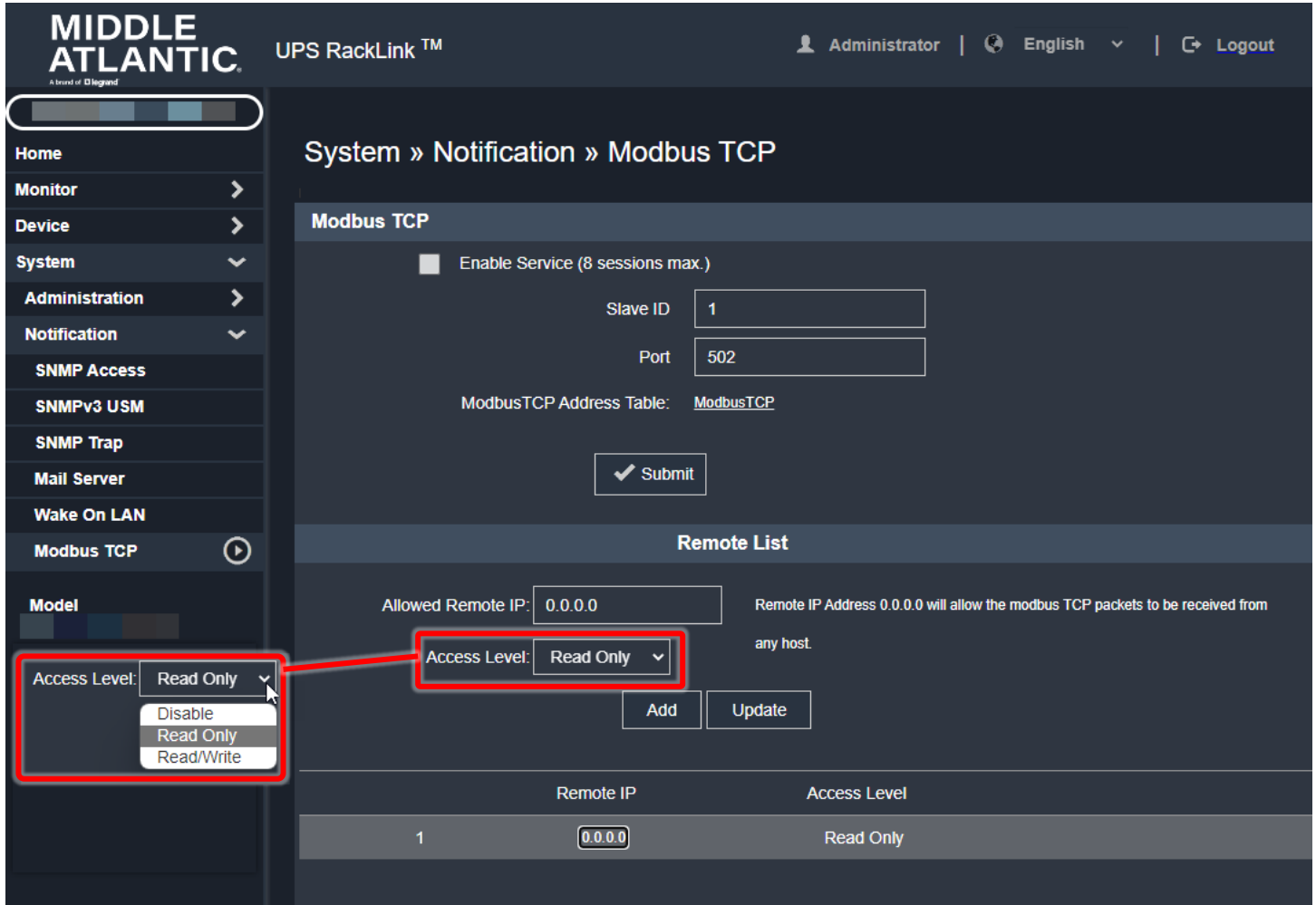
2. Mark the **Enable Service** check box to enable Modbus TCP on your system.
3. Use the **Slave ID** text box to specify an ID number.
4. Use the **Port** text box to specify the port number for your Modbus TCP service.
5. Use the **Modbus TCP Address Table** link to download the **modbustcp.pdf** address table, if desired.
6. Click **Submit** to apply the Modbus TCP service configuration to your network card.

Adding a Remote IP Address


For added security, you may add specific IP addresses and permit or deny access to the system. For added security, you can add remote IP addresses with Disable, Read Only, and Read/Write access levels on the system.

1. Click **System >> Notification >> Modbus TCP** on the navigation menu.


The Modbus TCP page appears.



3. Enter the following field values as desired and click **Add** to include the remote IP address to the list below.

 **NOTE** Update and Delete buttons only appear on the screen after providing a remote IP address to the list.

- Use the **Allowed Remote IP** text box to specify the IP address you want to add to the list.

 **NOTE** As indicated on the interface, enter 0 . 0 . 0 . 0 as the remote IP address to receive TCP packets from any host.

- Use the **Access Level** drop-down to choose from **Disable**, **Read Only**, and **Read/Write** options for the IP address.

Updating a Remote IP Address

1. Click **System >> Notification >> Modbus TCP** on the navigation menu.

The Modbus TCP page appears.

Remote List

Allowed Remote IP:

Access Level: Read Only v

Remote IP Address 0.0.0.0 will allow the modbus TCP packets to be received from any host.

Add
Update
Delete

	Remote IP	Access Level
1	0.0.0.0	Read Only
2	192.168.1.12	Read Only

2. Click the corresponding row of the remote IP address you wish to update.
Respective values for the selected remote IP address appear in the fields above the list.
3. Modify the fields as desired.
4. Click the **Update** button.

Deleting a Remote IP Address

1. Click **System >> Notification >> Modbus TCP** on the navigation menu.

The Modbus TCP page appears.

Remote List

Allowed Remote IP:

Access Level: Read Only v

Remote IP Address 0.0.0.0 will allow the modbus TCP packets to be received from any host.

Add
Update
Delete

	Remote IP	Access Level
1	0.0.0.0	Read Only
2	192.168.1.12	Read Only

2. Click the corresponding row of the remote IP address you wish to delete.
Respective values for the selected remote IP address appear in the fields above the list.
3. Click the **Delete** button.

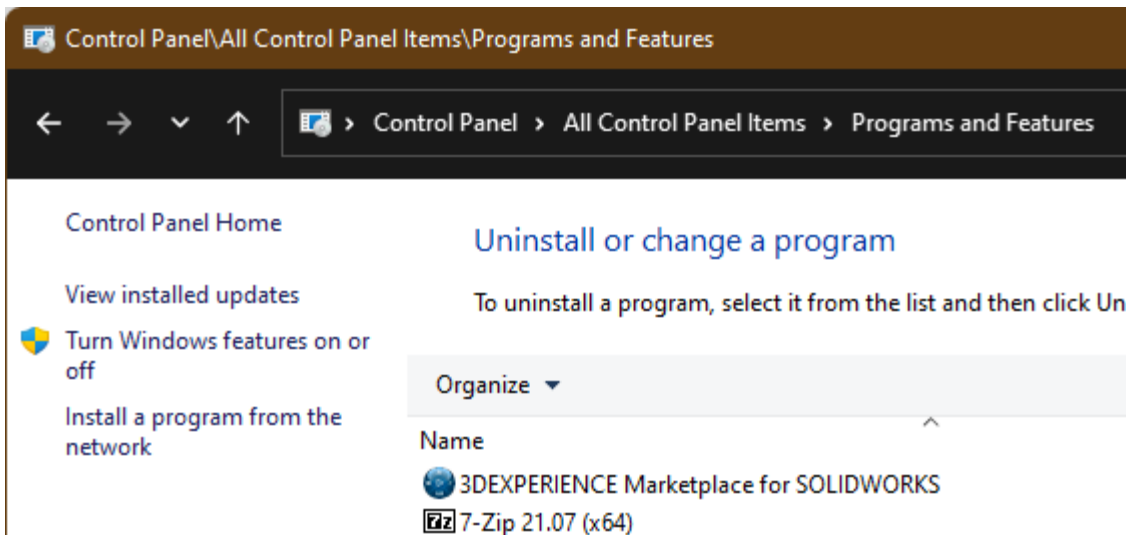
Troubleshooting

The following are phrased as common questions and solutions when using your network card and UPS.

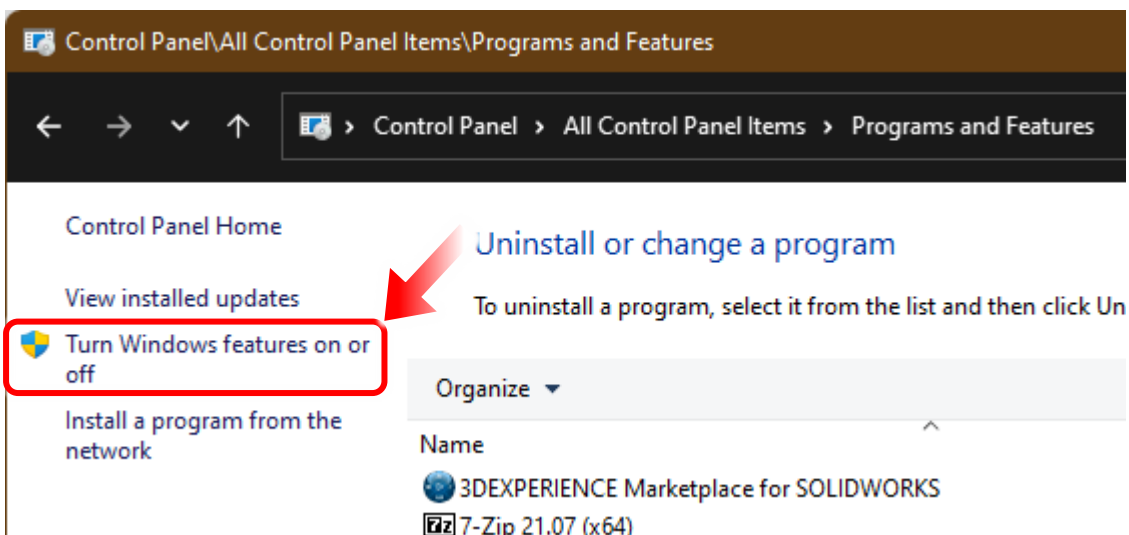
How do I set up an SNTP server on my workstation that is connected to the network card so the time can be synchronized?

1. On a computer connected to the same network as your card, access **Control Panel\All Control Panel Items\Programs and Features**.

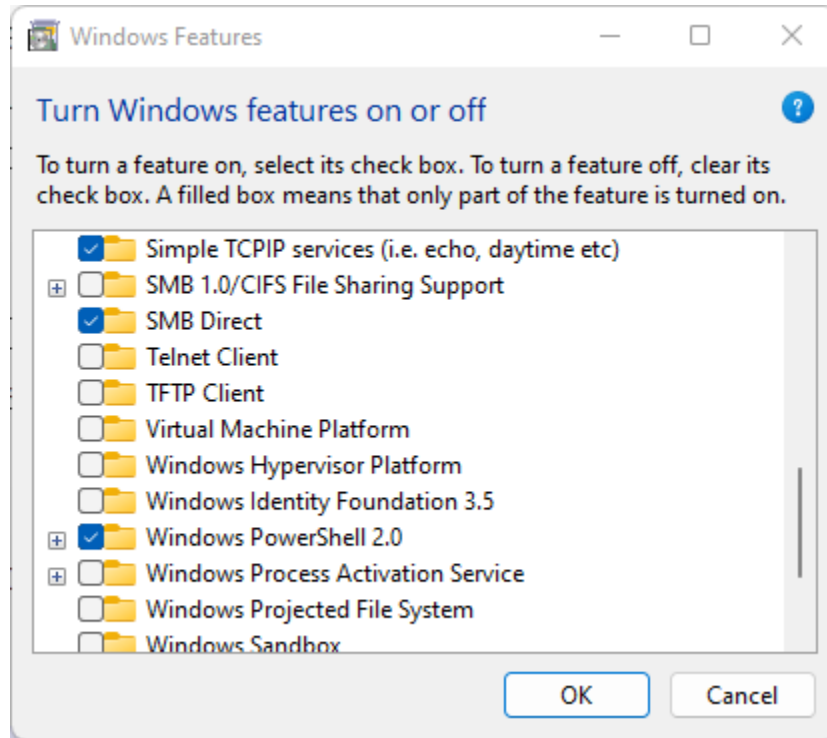
The Programs and Features screen appears.



2. Click **Turn Windows features on or off**.



The Windows Features pop-up appears.



3. Scroll down to find **Simple TCPIP services (i.e. echo, daytime etc)** and mark the check box.
4. Click **OK**.
5. In the network card web interface, make your SNTP time server configurations as needed. For more information, see "Time Server" on page [39](#).

How do I keep the network card On regardless of the UPS system being powered Off by sleep mode?

Sleep mode is disabled on the UPS by default. When enabled, sleep mode deactivates the network card port when the UPS is powered off locally, the batteries are fully charged, and the LCD panel is asleep. Powering off the UPS using a remote command will not disable the network card, to remove the chance of a remote user accidentally locking themselves out.

Disable the sleep mode function to keep your network card on regardless of your UPS power settings. For more information, refer to "Using Main Menu > Configuration Functions > Service Mode" in the NEXSYS Line Interactive UPS User Manual (100-00072) at www.legrandav.com.

I can access the network card web interface, but I cannot login in.

Please check the IP addresses of the network card and the workstation on which you are trying to log in. By default, they must be within the same LAN so you can connect via the web interface.

Why can't I ping the network card from my workstation?

You can find the IP address of your PC, laptop, workstation on Windows by entering **ipconfig /all** from the command prompt. For UNIX, please enter **ifconfig** in shell. You should be able to check your IP and MAC (Physical Address) in results returned similar to the following.

```
Physical Address. . . . . : 00-23-4D-A2-3A-2C
DHCP Enabled. . . . . : Yes
Autoconfiguration Enabled . . . . : Yes
Link-local IPv6 Address . . . . . : fe80::ad55:5b9b:74c6:e5fc%12 (Preferred)
IPv4 Address. . . . . : 172.16.186.97 (Preferred)
Subnet Mask . . . . . : 255.255.254.0

C:\>
```

When setting up the IP card for the first time using a direct RJ45 connection to the workstation without a router, it may be necessary to change your IP address to a static IP address. Please note that the IP card will have a default IP address of 192.168.1.201.

If the network card is non-responsive, check the following items:

- If the green LED indicator on the network card is OFF, check if the network cable is correctly connected from the network card to the router or hub.
- If the green LED indicator is ON, the current IP address could be unreachable. Manually assign a valid IP address to the network card.
- If the green LED indicator flashes and your network configuration includes a DHCP server, make sure the DHCP service is working properly.
- If the green LED indicator flashes and your network configuration does not include a DHCP server, make sure the assigned IP is not already taken on the network. Please note that if the current configuration is not useable, the network card uses the default IP settings as follows:

IPv4 address: 192.168.1.201 | **Net Mask:** 255.255.255.0 | **Gateway:** 192.168.1.1

If the problem persists, use a network cable to cross link your network card and the workstation and ping the network card's default or static IP address, according to your configurations. If a ping response is successfully received, indicating that the network card is working properly, check your network equipment. If not, contact support at av.middleatlantic.techsupport@legrand.com or (866) 977-3901.

What if I forget the Administrator account user name and password?

You can reset Administrator's account and password any of the following ways:

- Press the reset button on the network card.
For more information, see "Feature Set" on page [15](#).
- Reset your network card using the Manager Menu.
For more information, see "Default Reset" on page [41](#).

- Reset your network card using a serial port connection to the network card.
1. Make sure the DIP switches on your network card are both DOWN (in the ON position), which puts the card in configuration mode.
 2. Use the RJ45 to DB9 cable (C) to serial connect your workstation to the network card.
 3. Carefully pull the network card out of the UPS and plug it back in after approximately 10 seconds.
 4. Within 60 seconds after re-connecting the network card to your UPS, perform the following steps:
 - a. Launch a virtual terminal client on your serial connected workstation.
 - b. Open a COM Port with **2400** and **8N1** parameters.
 - c. At login and password prompts, enter **rstadmin**.

```
Login: rstadmin      rstadmin
Password: **** * rstadmin
```

The Administrator account and password are now reset.

- d. Enter the default Administrator account credentials: username: **admin** | password: **admin**.

```
Login: rstadmin      rstadmin
Password: **** * rstadmin
Please key in your account!
Login: admin         admin
Password: **** * admin
```

- e. The system then has you change the default passwords for the three system accounts.

For more information, see “Understanding Default Administrative Account Setting” on page [18](#).

How do I generate a private SSL certificate file (in PEM format) for an HTTPS connection?

To ensure connection security between the network card and your workstation, you can create your own SSL certificate file. Please download and install OpenSSL Toolkit from <http://www.openssl.org>. Launch Shell or DOS prompt mode and enter the following command to create your own certificate file:

```
openssl req -x509 -nodes -days 3650 -newkey rsa:1024 -  
keyout cert.pem -out cert.pem
```

1. Answer the prompted questions. Proceed with the given directions. Once it is completed, a file named cert.pem is created in the current working directory.
2. Upload cert.pem to the network card Web. Please refer to **5-4-1 Administration – Web**.

How do I generate DSA, RSA, and Public keys for SSH?

On Windows:

1. Please download and install PuTTY from <http://www.putty.org>.
2. Run **puttygen.exe** from the installed directory.
3. Select **SSH-2 RSA** from the Parameters area and click **Key >> Generate key pair** to generate an RSA key.
4. Click **Conversions >> Export OpenSSH Key** and assign a filename to the RSA key. Please ignore it when prompted to provide key passphrase.
5. Select **SSH-2 DSA** from the Parameters, click **Key >> Generate key pair** to generate a DSA key.
6. Click **Conversions >> Export OpenSSH Key** and assign a filename to the DSA key. Please ignore it when prompted to provide key passphrase.
7. Copy the generated key from the text box, paste in a text editor and save it as a text file.



8. Upload the DSA/ RSA/ Public keys files to the network card Web. Refer to 5-4-1 Administration – Console for more information.

On Linux:

1. Please download and install OpenSSH from <http://www.openssh.org>.
2. Launch Shell and enter the following commands to create your own keys (please ignore it when prompted to provide passphrase):

```
DSA Key:ssh-keygen -t dsa RSA Key:ssh-keygen -t rsa
```

3. Upload DSA and RSA keys to the network card Web. Please refer to **5-4-1 Administration – Console** for more information.

How do I test SNMPv3?

If you are testing SNMPv3 using a command line on a Windows workstation, we recommend downloading, installing, and using SNMPWalk (available standard on Linux) at <http://www.net-snmp.org>.

Before you can access the SNMP OID (Object Identifier) through the SNMPv3 protocol, the SNMPv3 USM table must be organized.

For more information, see "Using the System >> Notification >> SNMPv3 USM (User Session Management) Page" on page [91](#).

Use the following command to test SNMPv3 on Windows workstations running SNMPWalk or Linux by launching shell and using the following command format:

```
snmpwalk -v 3 -u <user> -l authPriv -A <password> -X  
<password> -n <context name> -t 3 <ip> 1.3.6.1.2.1.1.1.0
```

The following options are available:

- **-v**: 1 for SNMPv1, 3 for SNMPv3.
- **-l**: Follow the security levels. They are: noAuthNoPriv, authNoPriv and authPriv.
- **-u**: The user name which is assigned from SNMPv3 USM table.
- **-A**: The Auth Password which is assigned from SNMPv3 USM table.
- **-X**: The Priv Password which is assigned from SNMPv3 USM table.
- **-n**: The Context Name which is assigned from SNMPv3 USM table.
- **-t**: Timeout in seconds.
- **<ip>**: The IP address of the network card.
- **<oid>**: The next available SNMP OID (for example: 1.3.6.1.2.1.1.1.0).

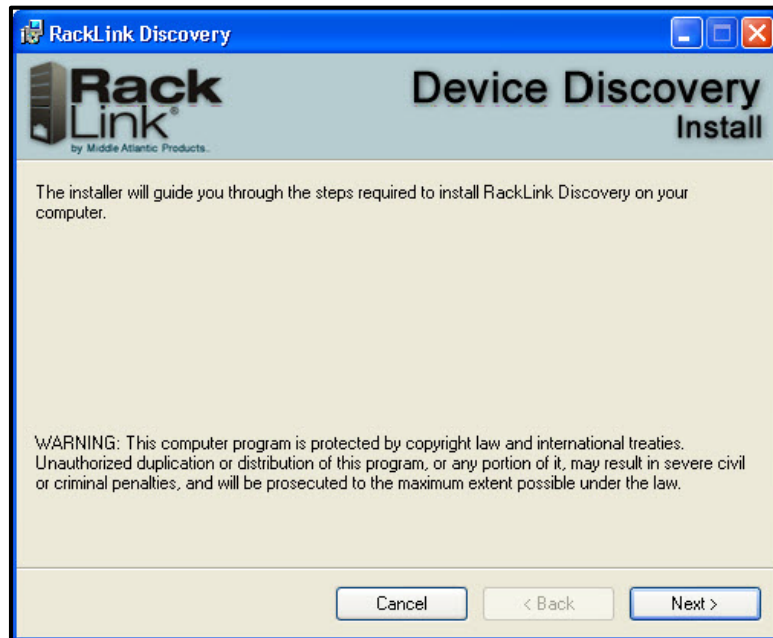
For more information, see "Using the System >> Notification >> SNMP Access Page" on page [89](#), refer to Net-SNMP at www.net-snmp.org, and the MIB file provided in the web interface.

Installing The Device Discovery Software on a PC

Use the following steps to download and install the Device Discovery software on a PC.

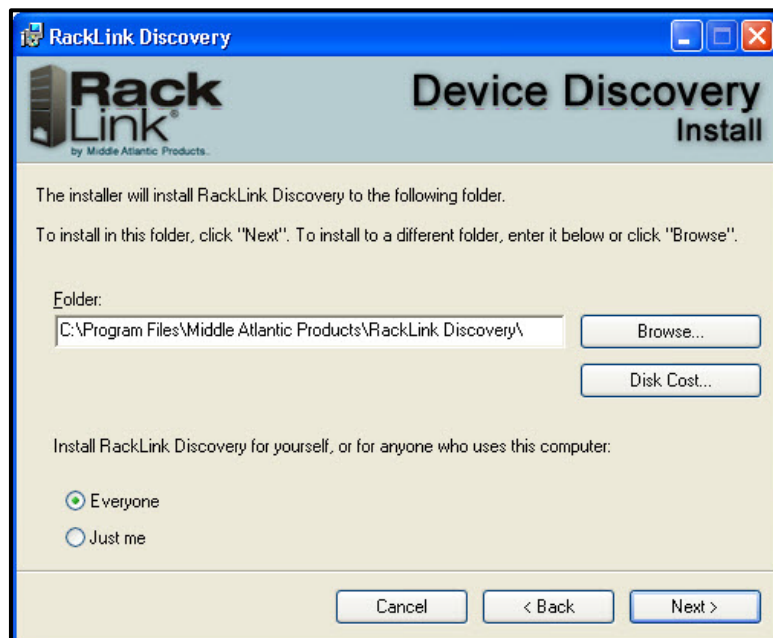
1. Download the Device Discovery tool at <https://www.legrandav.com/resources/power-downloads>.
2. Run the RackLink Device Discovery setup file.

The Device Discovery Setup dialog box appears.



3. Click **Next**.

Additional installation options appear.

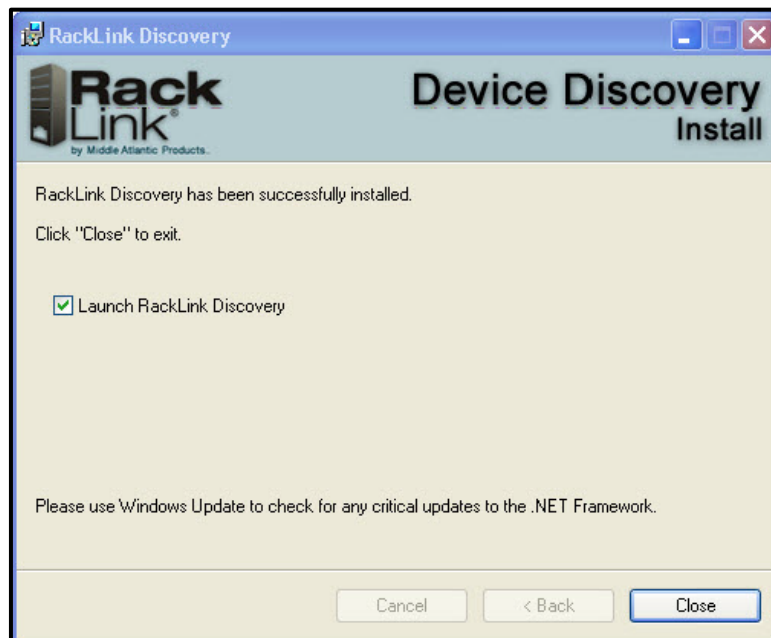


4. Click **Browse** if you wish to change the software installation folder.
5. If desired, select whether you want to install RackLink Discovery for everyone, or just the current user.
6. Click **Next**.



The installer indicates that it's ready to install RackLink Discovery on your computer.

7. Click **Next** to begin the installation.



The installer indicates that RackLink Discovery has been successfully installed and provides a default check box selection to Launch RackLink Discovery after closing the installer.

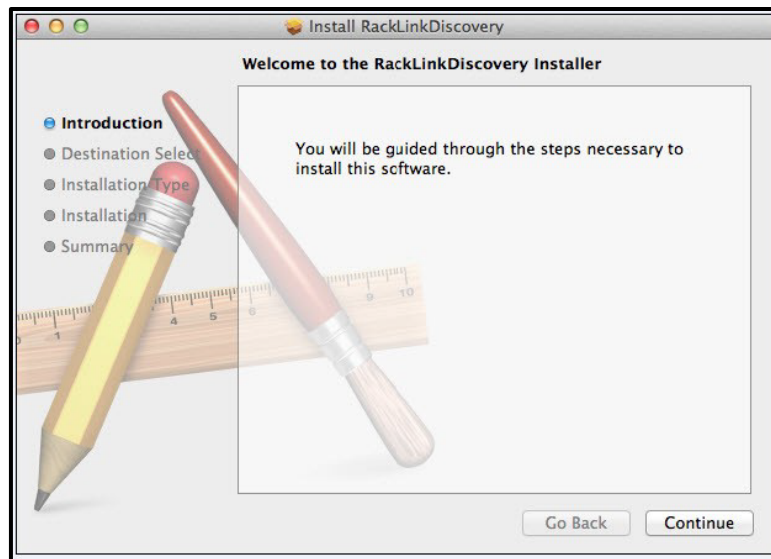
8. Click **Close**.

Installing The Device Discovery Software on a Mac

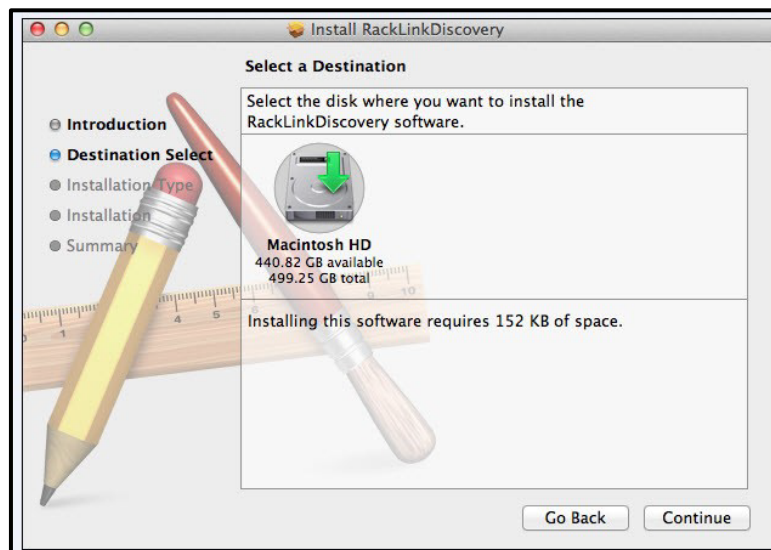
Use the following steps to download and install the Device Discovery software on a Mac®.

1. Download the Device Discovery RackLinkDiscovery.pkg file at <https://www.legrandav.com/resources/power-downloads>.
2. Run the RackLink Device Discovery setup file.

The Device Discovery Setup dialog box appears.

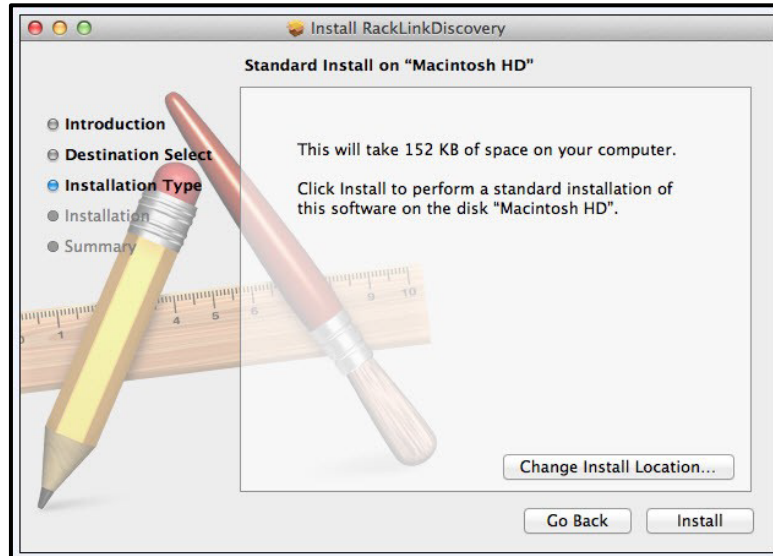


3. Click the disk and modify the location if you wish to change the software installation folder.



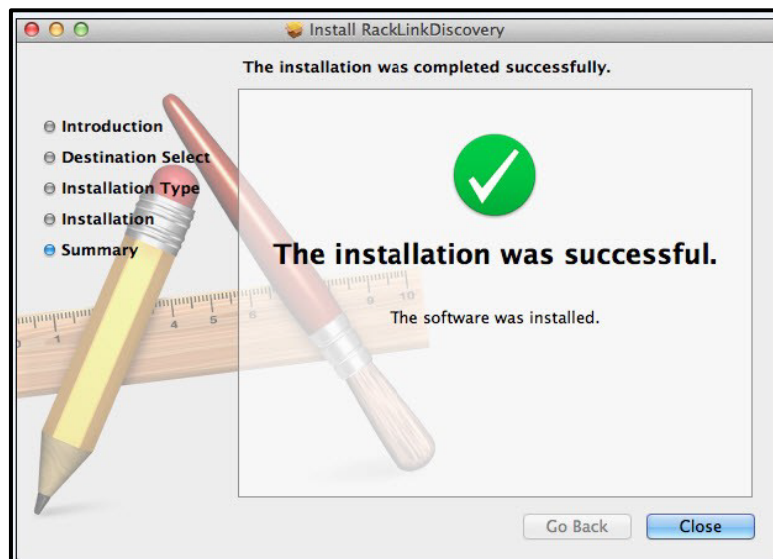
4. Click **Continue**.

The Installation Type screen appears.



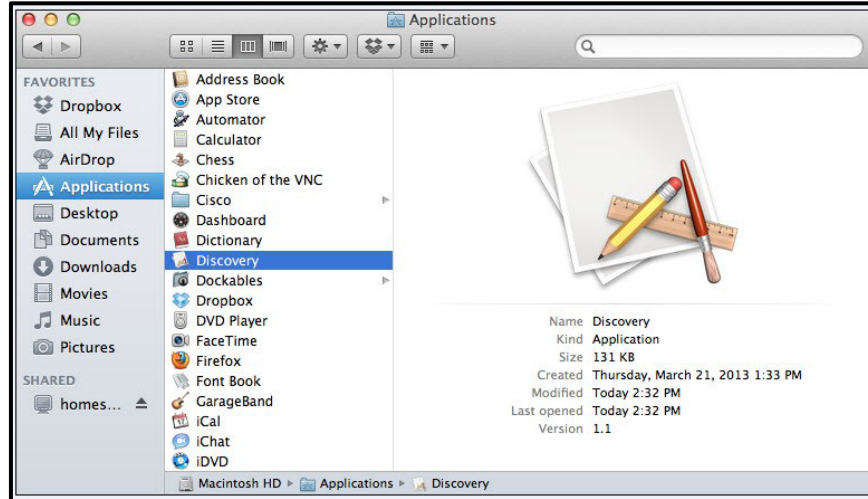
5. Click **Change Install Location** if you wish to change the software installation folder.
6. Click **Install**.

The installer indicates that the installation was completed successfully.



7. Click **Close**.

- Click Applications in the Finder to locate the RackLink Discovery application.

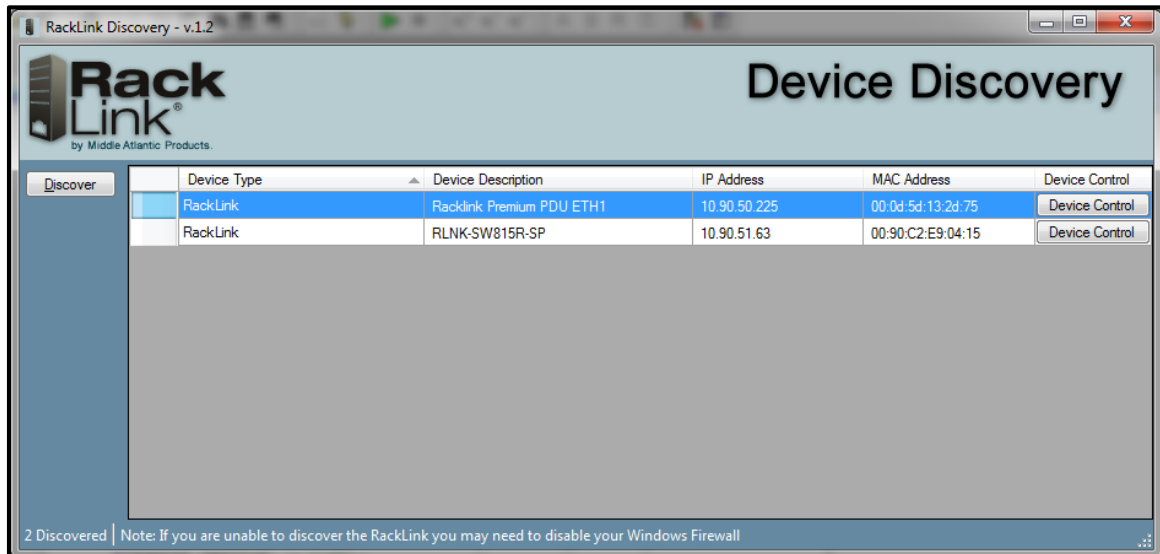


Using Device Discovery

- After launching your RackLink Device Discovery program, the tool automatically discovers all RackLink devices on the subnet to which you are connected.
- Use the **Discover** button to refresh the screen and discover any newly connected RackLink devices. By default, the RackLink device is set for DHCP. You can identify each device by the MAC address or IP address.

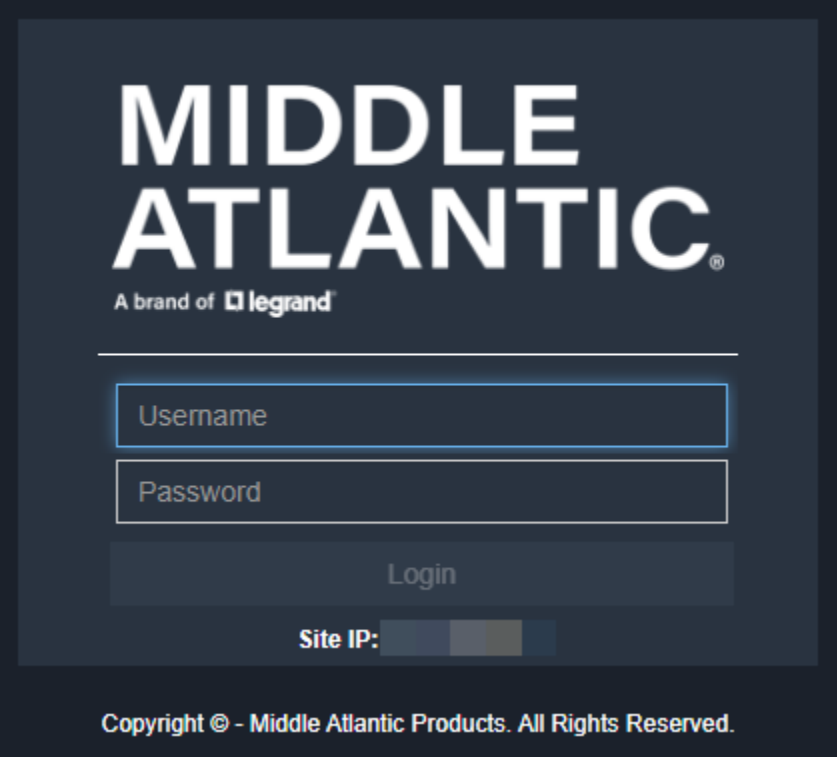


NOTE You may need to disable your Windows firewall to discover your PDU.



- Click **Device Control** to access the web interface for a specific device.

4. The system prompts you for a username and password.



MIDDLE ATLANTIC
A brand of **legrand**

Username

Password

Login

Site IP: [blurred]

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For more information, see “Connecting to Your Network Card Using the Web Interface” on page [22](#).

Warranty

For warranty information, refer to www.legrandav.com/policies/warranty_information.

Contacting Corporate Headquarters

P: (866) 977-3901 | F: (877) 894-6918 | www.legrandav.com | av.support@legrand.com

Contacting Middle Atlantic Canada

P: (888) 766-9770 | F: (888) 599-5009 | ca.middleatlantic.com | av.canada.customerservice@legrand.com

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