# 1T-FC-677
## 3G-SDI Extender/HDMI Converter

### Overview

1T-FC-677 3G-SDI Extender with HDMI Converter allows SD-SDI, HD-SDI and 3G-SDI signals to be displayed on either an SDI and an HDMI monitor simultaneously. The high bit rate processing of 2.970 Gbit/s ensures fast signal transmission without signal loss and also allows great flexibility in monitor selection since extremely high quality displays can be accomplished on either a high resolution SDI monitor or high resolution HDMI display. Even greater utility is provided by the unit's SDI Extender capability. Two Equalized and Re-clocked SDI outputs are provided.

Automatic input signal type detection is provided and up to 8 channels of audio de-embedding is possible. SDI Audio channels are automatically detected and are output over HDMI as either LPCM 2.0 or LPCM 7.1. If there are less than 8 active channels of audio, the 1T-FC-677 will automatically select the first 2 channels and output them over the analog stereo and HDMI outputs as LPCM 2.0. If there are 8 active channels, the first 2 channels will be output over the analog stereo outputs and the HDMI output will contain a full LPCM 7.1 audio signal. The unit employs the unique tvONE locking DC power connector to enhance overall system mechanical security.

### Key Features
- 3G, SD and HD-SDI to HDMI Signal Conversion
- Simultaneous Display of 3G SDI & HDMI
- Operation at 2.970Gb/s, 2.970/1.001Gb/s, 1.485Gb/s, 1.485/1.001Gb/s and 270Mb/s
- Supports SMPTE 425M(A&B), 424M, 292M, 259MC
- Equalized and Re-Clocked Looped Output
- Integrated 8-Channel 48Khz Audio De-Embedder
- LPCM 2.0 or LPCM 7.1 over the HDMI output
- Automatic Video Detection of 3Gi, SD & HD-SDI
- Conversion of SMPTE 425M B to A for 1080p
- Cascade multiple units for maximum flexibility
- Allowable SDI Transmission Distances of
  - 300m for SD, 200m for HD, 100m for 3G
- Locking DC Connector

### Specifications

**Video Input**
- 3G, HD, SD-SDI

**Video Outputs**
- 3G, HD, SD-SDI (Equalized, Re-clocked)
- HDMI v1.3

**De-embedded Audio**
- Analog Stereo R+L

**Video Signal Proc.**
- Input Signal Auto Detection of Signal Type
- Output Signal EQ. & Re-Clocked SDI Output
- SDI throughput Rates 2.970 Gb/s & 2.970/1.001 Gb/s

**Audio Processing**
- Up to 8 channels, 48Khz

**SMPTE Standards**
- SMPTE I/O Supported 425M(A&B), 424M, 292M, 259MC

**Video Formats**
- SD and HD Formats 480i, 576i, 720p, 1080i, 1080p

**SDI Cable Distance**
- Max SDI Distance SDI=300m, HD=200m, 3G=100m

**Environmental**
- Operating Temperature 0° to +40° C (+32° to +104° F)
- Operating Humidity 20% to 90%, Non-condensing
- Storage Temperature -10° to +60° C (+14° to +140° F)
- Storage Humidity 20% to 90%, Non-condensing

**Warranty**
- Limited Warranty 3 Years Parts and Labor

**Regulatory Approvals**
- Main Unit FCC, CE, RoHS
- Power Supply UL, CUL, CE, PSE, GS, RoHS

**Mechanical**
- Size (H-W-D) 30 x 200 x 103.5mm (1.18 x 7.87 x 4.07")
- Weight (Net) 585g (1.29 lbs)

**Power Requirement**
- External Power Supply 5VDC@2.6A, Locking DC

**Accessories Included**
- 1x Power Adapter US, UK or Euro
- 1x User Manual

**Model Number**
- 1T-FC-677 3G-SDI Extender/HDMI Converter

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1T-FC-677 Specification Sheet Version 2.0
www.tvone.com
1T-FC-677
3G-SDI Extender/HDMI Converter

Panel Drawings

1T-FC-677
3G SDI Extender + HDMI Converter