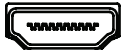


### APPEARANCE



### DESCRIPTION

The ComNet™ FVT/FVR(X)MI[/M] features an HDMI™ fiber link for uncompressed high-resolution bi-directional communication with full HDCP copyright protection, EDID and CEC connection functionality. The high-resolution signal is transmitted over one multimode fiber using multiple wavelengths up to 1000m. Resolutions of up to 1080p60 are supported. HDCP encryption is not affected or compromised by the FVT/FVR(X)MI units.

The FVT/FVR(X)MI[/M] transmits pixel-for-pixel images and full 24-bit scan rate with no contouring or bit reduction. This unit is fully compatible with HDMI™ compliant sources and monitors, supporting all possible horizontal and vertical sync configurations. The CEC support provided by these units allows the user to communicate with up to ten CEC-enabled devices connected via HDMI™.

The FVT/FVR(X)MI[/M] transmits up to 8 channels of uncompressed audio at sample sizes of 16-bit, 20-bit and 24-bit, with sampling rates of 32 kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz and 192 kHz. This series also supports any IEC 61937-compliant compressed audio stream, such as Dolby Digital and DTS, and up to 8 channels of one-bit DSD audio (as used on SACD/Super Audio CDs), and at rates up to four times that of Super Audio CD, and lossless compressed audio streams such as Dolby True HD and DTS-HD Master Audio.

A locking screw prevents the connectors from accidental disconnection.

Packaged in either a small stand-alone housing or the exclusive ComNet ComFit housing, the FVT/FVR(X)MI standard size product may be either wall or rack-mounted, or may be DIN-rail mounted by the addition of ComNet model DINBKT1 adaptor plate.

### FEATURES

- › Supports up to 1080p60
- › Scalable to HDMI Version 1.3a - 16 bit color
- › Bi-directional communication for HDCP copyright, EDID and CEC functionality
- › HDCP encoding remains intact and unmodified
- › Fully uncompressed, 100% transparent, No Frame Dropping
- › Mounting Options:
  - Small stand-alone package (FVT/FVR1MI/M)
  - Optional ComNet model C1 rack
  - 1 RU racking system available
- › Power Supply Included
- › Locking cable connector
- › Lifetime Warranty

### APPLICATIONS

- › Medical and MRI Displays
- › Advertising and Signage
- › Event Video Displays
- › Digital Cinema
- › Radar Displays for ATC and Military Applications
- › Commodity and Stock Exchanges

## SPECIFICATIONS

## HDMI™

Video Modes: 3.5Gbps: 1920 × 1080p @ 60Hz up to 500m  
1.65Gbps: 1920 × 1080p @ 30Hz up to 1000m  
Scalable to HDMI Version 1.3a - 16 bit color

## Connectors

Optical: SC  
Power: Terminal Block  
HDMI™: Type A

## Optical

Fiber: Multimode  
Wavelengths: 778, 800, 825, 850, 911, 980 nm  
Power: 0dBm per lane typical  
Distance (assumes no skew limit): ≤ 1080p30 1080p60  
OM1 (160MHz/km) 200 m 100m  
OM2 (500MHz/km) 400 m 200m  
OM3 (1000MHz/km) 1000 m 500m

Led Indicator - Link -Source Cable - Source ON - Sink ON

## Electrical &amp; Mechanical

## Mini Long

Surface Mount Power: 8 -15 VDC @ 0.125A  
Size (L×W×H) 4.08 × 3.74 × 1.1 in. (10.36 × 9.5 × 2.8 cm)  
Shipping Weight: <1 lb./0.45 kg

## ComFit

Power: 8 -15 VDC @ 0.125A (1CH) @ 0.250A (2CH)  
Surface Mount Power: From Rack  
Rack Mount Power: 6.1 × 5.3 × 1.1 in. (15.5 × 13.5 × 2.8 cm)  
Size (L×W×H) <2 lb./0.9 kg  
Shipping Weight: Automatic Resettable Solid-State Current Limiters  
Current Protection: Meets IPC Standard

## Environmental

MTBF: >100,000 hours  
Operating Temp: -40° C to +75° C  
Storage Temp: -40° C to +85° C  
Relative Humidity: 0% to 95% (non-condensing)\*

\* May be extended to condensation conditions by adding suffix '/C' to model number for conformal coating.



MADE IN THE  
USA

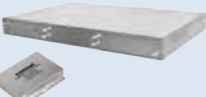
## ORDERING INFORMATION

| Part Number | Description                                                                                  | Fibers Required | Optical Power Budget   | Max Distance†   | # of Rack Slots |
|-------------|----------------------------------------------------------------------------------------------|-----------------|------------------------|-----------------|-----------------|
| FVT1MI      | HDMI™ Transmitter - Single Channel                                                           | 1               | 14 dB min., 16 dB typ. | 1000m (3280 ft) | 1               |
| FVT2MI      | HDMI™ Transmitter - Dual Channel                                                             | 2               | 14 dB min., 16 dB typ. | 1000m (3280 ft) | 1               |
| FVR1MI      | HDMI™ Receiver - Single Channel                                                              | 1               | 14 dB min., 16 dB typ. | 1000m (3280 ft) | 1               |
| FVR2MI      | HDMI™ Receiver - Dual Channel                                                                | 2               | 14 dB min., 16 dB typ. | 1000m (3280 ft) | 1               |
| FVTRMI      | HDMI™ Transceiver - 1 Channel Transmitter, 1 Channel Receiver                                | 2               | 14 dB min., 16 dB typ. | 1000m (3280 ft) | 1               |
| FVT1MI/M    | Mini HDMI™ Transmitter - Single Channel                                                      | 1               | 14 dB min., 16 dB typ. | 1000m (3280 ft) | NA              |
| FVR1MI/M    | Mini HDMI™ Receiver - Single Channel                                                         | 1               | 14 dB min., 16 dB typ. | 1000m (3280 ft) | NA              |
| Accessories | 9 Volt DC Plug-in Power Supply, 90-264 VAC, 50/60 Hz (Included)                              |                 |                        |                 |                 |
| Options     | Add suffix '/C' for Conformally Coated Circuit Boards (Extra charge, consult factory)        |                 |                        |                 |                 |
|             | DIN-Rail Mounting Adaptor Plate Kit - With mounting hardware (Optional, order model DINBKT1) |                 |                        |                 |                 |

† Maximum distance requires OM3 grade fiber running at resolutions of 1080p30 or lower at 1.65Gbps.

NOTE: This product requires a fiber installation with a minimum 30 dB connector return loss. The use of Super Polish Connectors is recommended. Complies with FDA Performance Standard for Laser Products, Title 21, Code of Federal Regulations, Subchapter J. In a continuing effort to improve and advance technology, product specifications are subject to change without notice.

## RACK OPTIONS

|    |                                                                    |                                                                                       |
|----|--------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| C1 | 19 in wide × 4 RU high, 14 slot with internal power supply         |    |
| C3 | 19 in wide × 1 RU high, 3 slot, for use with external power supply |  |

## TYPICAL APPLICATION



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