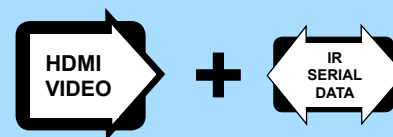


HDMI with IR Over One Fiber**FEATURES**

- Extend HDMI Video up to 1080p, 60Hz and Graphic Resolutions up to 1920x1200 Over One Fiber
- HDMI 1.3A and HDCP V1.2 Compliant
- No Settings or Adjustments Necessary, Automatically Recognizes HDCP, EDID & CEC
- IR Bi-directional Data Channel Over Same Fiber
- Local LEDs for Link Activity Status
- Available for Both Singlemode and Multimode applications
- Multimode Distances Available in Excess of 300 Meters (Fiber Dependent)
- Singlemode Unit Supports Distances up to 25km
- Uses Small, Reliable LC Optical Connector

DESCRIPTION

The Meridian **MT/MR-1DM/1IR-x** fiber HDMI transmitter & receiver is designed to send 1 channel of 1.3a compliant HDMI video with embedded audio and 1 channel of IR serial data. HDCP is also automatically supported for the transmission of content-protected video.

These small modules utilize one multimode or singlemode fiber with a standard locking LC optical connector. They support video resolutions up to 1080p @ 60Hz and graphic resolutions of up to 1920x1200 over one fiber. An additional IR channel is provided for control of data applications. Operating on 5V DC power over a standard micro-USB connector, these modules are ready for easy installation and operation.

MARKETS

- ✓ Digital Signage
- ✓ Video distribution systems
- ✓ Educational
- ✓ Video walls
- ✓ Home theater
- ✓ Entertainment centers

SPECIFICATIONS:

Video

HDMI compliance	1.3a
HDCP compliance	v1.2
EDID	plug-n-play
Max resolution	PC Monitor (1920x1200) HDTV (1080p @ 60Hz)

Data

Formats	Serial via IR connection
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Optical

Optical Fiber	one multimode or singlemode
Data rate	6.25 Gb/s
Operating distance	Up to 25km*
Loss budget	12dB, approx.

Connectors

Power	micro-USB (Female)
Video	HDMI Type A (Female)
Optical	LC
Data	2.5mm Phone Jack (Female)

Power **

TX	2.7 Watts @ 5VDC
RX	2.1 Watts @ 5VDC

Diagnostic LED Functions

Rapid flash on power up
Slow flash – no fiber
Steady ON – link established

Physical

Dimensions	1.54" x 2.17" x 0.57" 39mm x 55mm x 14.5mm
Weight (unit)	137 gms (4.8 Oz)

Environmental

Operating Temperature	0°C to +74°C
Storage Temperature	-20°C to +85°C
Relative Humidity	10 to 90% Non-condensing

Quality

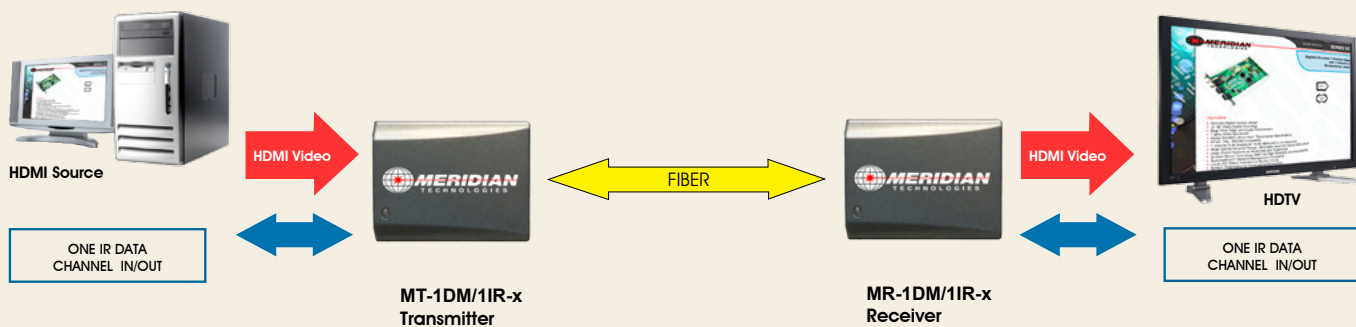
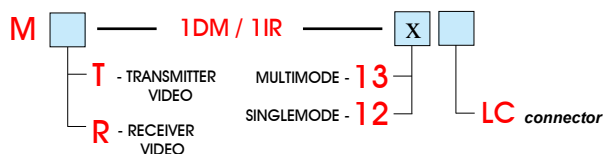
MTBF	>170,000 hours @ Ground Fix 35°C per MIL217F
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Part Numbers:

MT-1DM/1IR-13 - Transmitter (multimode)
MR-1DM/1IR-13 - Receiver (multimode)
MTR-1DM/1IR-13K - Kit (Tx & Rx pair, multimode)
MT-1DM/1IR-12 - Transmitter (singlemode)
MR-1DM/1IR-12 - Receiver (singlemode)
MTR-1DM/1IR-12K - Kit (Tx & Rx pair, singlemode)

* measured @ max. optical budget

** Power shown @ max value



OPTICAL:

Meridian Fiber Code	Fiber Type/Size (um)	Optical Output (dBm)	Receiver Sensitivity (dBm)	Optical Budget (dB)	Wavelength (nm)	Optical Connector	Optical Dynamic Range (dB)	Estimated Maximum Transmission Distance (km)
13	Multimode (Laser) 62.5 / 125	-5	-17	12	850/1310/1550	LC	20	0.3
12	Singlemode (FP Laser) 9 / 125	-5	-17	12	1310/1490/1550	LC	20	25

Meridian Technologies Inc.

700 Elmont Road. • Elmont, NY 11003 • 516. 285. 1000 • FAX 516. 285. 6300 • E-mail sales@meridian-tech.com
www.meridian-tech.com

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