

Digitally Encoded One Channel
 10-Bit 10MHz Video
 in small standalone module



FEATURES:

- Small Standalone Module Design
- 10-Bit Video Digital Encoding
- Real-Time Video Transmission
- 10 MHz Video Bandwidth
- Meets RS-250C Short Haul Transmission Specifications
- NTSC, PAL, SECAM Compatible
- Wide Optical Dynamic Range – Eliminates Need For Optical Attenuators
- Laser Based System for Either Multimode or Single-mode Operation
- Local LED Status Indicators to Monitor Critical System Functionality
- ST or FC Optical Connectors
- Laser Back-Biased Photo Detector Circuitry for Stable Optical Output over Full Temperature Range
- Meets EIA RS-170 Formats
- Meets Nema TS1/TS2 And Caltrans Specifications
- 75 Ohm BNC Video Connector (Gold Center Pin)

DESCRIPTION:

This fiber-optic system is part of our expanding DigiSlim™ product family and incorporates an all-digital encoding technology. The MT/MR-1U-x (small standalone module) transmit/receive one channel of high performance 10-bit digitally-encoded video over one multimode or single-mode fiber.

This products also features a high, 10MHz video channel bandwidth for superb video quality. NTSC, PAL and SECAM video formats are seamlessly supported.

MT/MR-1U-x are compatible with ST/SR-1U-x rack card version of this product. For more details see ST/SR-1U-x datasheet.

NOTE: Transmitter unit MT-1U-xE (with option "E") features High Efficiency, Low Power Consumption Isolated Power Supply.*

Transmitter unit MT-1U-xA (with option "A") features 5VDC Power Supply.

These options are available only for Transmitter units.

* Additional charges may apply

CONFIGURATIONS:

This system is available in small standalone modules (MT/MR-1U-x) and can be desk or wall mounted.

MARKETS:

- ✓ Intelligent transportation systems (ITS)
- ✓ Security and surveillance

SPECIFICATIONS:

Video

Format	NTSC, PAL, SECAM
Voltage/Impedance	1 Vp-p, 75 Ohm, 1.5 Vp-p max.
Bandwidth	5 Hz to 10 MHz @ -3 dB
Differential Gain	<0.6%
Differential Phase	<0.3°
SNR	>67 dB (weighted)*
Return Loss	>30 dB
Field Tilt	< 0.5%

Optical

Fiber Data Rate	270 Mb/s
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Connectors

Video	75 Ohm BNC (Gold Center Pin)
Optical	ST, FC

Power **

Small Module	12-24VAC or DC
Power	2W

Indicators (LEDs)

1 - Bi-color	Video Monitor Status
	Video Present (Green)
	Video Absent (Red)
1 - Bi-color	Optical Monitor Status
	TX Carrier (Green)
	Error (Red)

Physical

Dimensions (Module)	86 mm (3.35") L, 46 mm (1.8") W 19mm (0.735") D
Weight (Module).....	100 gms (3.52 Oz)

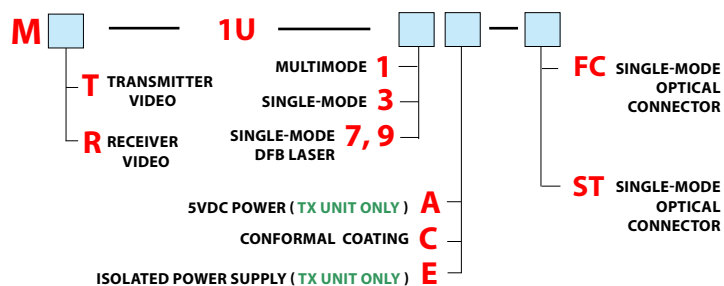
Environmental

Operating Temperature ...	-34°C to +74°C
Storage Temperature	-55°C to +85°C
Relative Humidity	0 to 95% Non-condensing

Quality

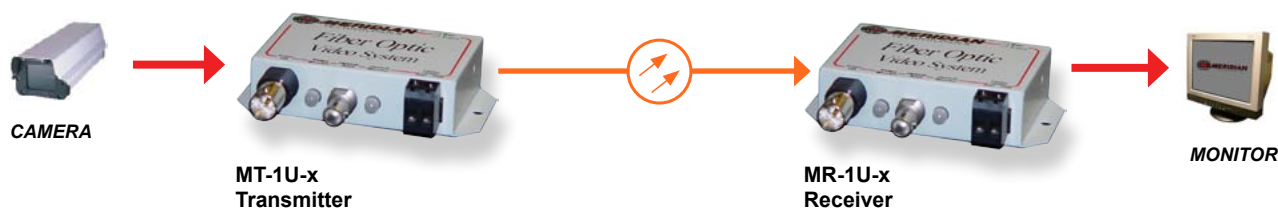
MTBF	>170,000 hours @ Ground Fix 35°C per MIL217F
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Part Numbers:



* measured @ max. optical budget

** Due to variations of drivers and diagnostic options, power shown @ max value



OPTICAL:

Meridian Optical Code	Fiber Type/Size (um)	Optical Output (dBm)	Receiver Sensitivity (dBm)	Optical Budget (dB)	Wavelength (nm)	Optical Connector	Optical Dynamic Range (dB)	Max Distance (Km)
1	Multimode (Laser) 62.5 / 125	-3	-22	19	1300	ST	22	3.5
3	Single-mode (FP Laser) 9 / 125	-3	-22	19	1310	ST, FC	22	50
7, 9	Single-mode (DFB Laser) 9 / 125	+3	-22	25	1550, 1310	ST, FC	22	70

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