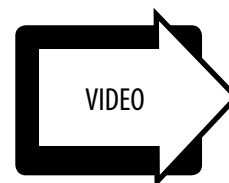
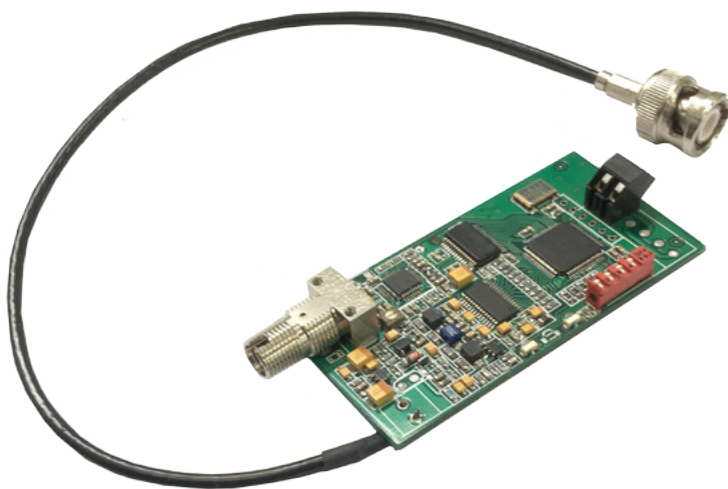


**Digitally-Encoded One Channel
10 Bit Video Transmitter****FEATURES:**

- 10-bit Digitally-encoded Real-time Video
- 10 Mhz Video Bandwidth
- Meets RS-250C Short Haul Transmission Spec.
- On-board LED Indicator for Camera-independent Testing
- SpectraView™ Video Diagnostics for Real-time Monitoring of Video Link
- Both Singlemode and Multimode Versions Available
- ST, FC Optical Connectors Available
- Laser Back-biased Photo Detector Circuitry for Stable Optical Output Over Full Temperature Range
- 10 Year Warranty

RECEIVER COMPATIBILITY:

This transmitter is compatible with the following receivers:
SR-1U-x1 channel receiver card
SR-3U-x3 channel receiver card
MR-1U-x1 channel receiver module

DESCRIPTION:

Meridian's BT-1U-x-E94 product is a bare board fiber optic transmitter.

Utilizing 10-bit digital encoding, this transmitter meets RS-250C short haul specifications and provides exception video quality. This board also contains on-board LEDs to allow testing/diagnostics without having the camera connected.

This transmitter board is part of Meridian's DigiSlim product family and transmits one real-time, simplex, fixed video signal over either singlemode or multimode fiber (see part number configuration for ordering details).

The DigiSlim product series incorporates Meridian's SpectraView real-time diagnostics for fast, easy to interpret information on the integrity of the optical link. Using SpectraView, the entire fiber transmission system can be tested without the need to have the camera attached. Convenient gray-scale bars on the monitor are displayed when either the video input signal or the optical fiber has been disrupted.

MARKETS:

- ✓ Security and Surveillance
- ✓ Underwater Research
- ✓ Oil and Gas Exploration

SPECIFICATIONS:

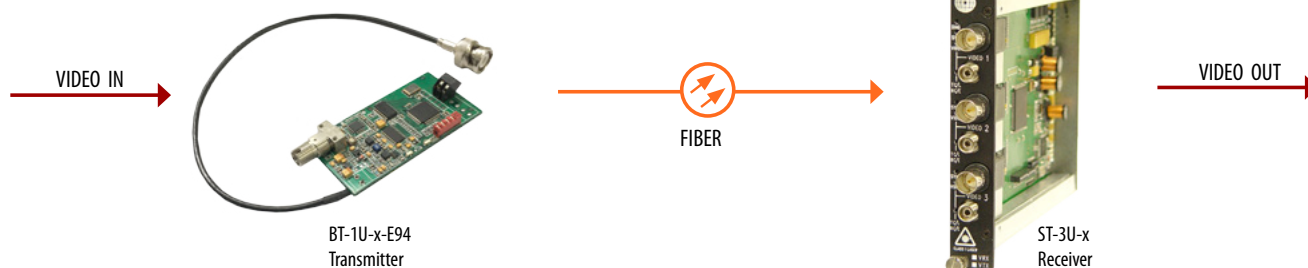
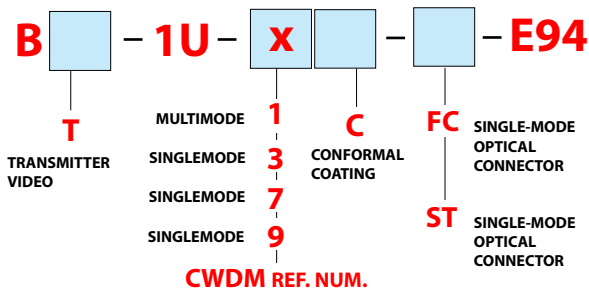
Video	
Formats	NTSC, PAL, SECAM
Voltage/Impedance	1 Vp-p, 75 Ohm, 1.5 Vp-p max.
Bandwidth	5 Hz to 10 MHz @ -3 dB
Differential Gain	<0.6%
Differential Phase	<0.3°
SNR	>67 dB (weighted)*
Return Loss	>30 dB
Field Tilt	< 0.5%
Optical	
Fiber Data Rate	270 Mbps
Connectors	
Video	75 Ohm BNC Female
Optical	FC, ST
Power	2-pin Screw Terminal
Compatible Receivers	
SR-1U-x	1 channel receiver card
SR-3U-x	3 channel receiver card
MR-1U-x	1 channel receiver module

* measured @ max. optical budget

Power	
Input Power	12VDC
Power Consumption	1.8 W
Physical	
Dimensions	69 (L) x 35 (H) x 15 (W) mm (2.70 x 1.38 x 0.60 inch)
Weight	35 gms (1.24 lb.)
Environmental	
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +85°C
Relative Humidity	0 to 95% Non-condensing
Quality	
MTBF	>200,000 hours @ Ground Fix 35°C per MIL217F

CWDM LASER GUIDE			
REF. NUMBER	WAVELENGTH	REF. NUMBER	WAVELENGTH
27	CWDM, 1270 nm DFB	47	CWDM, 1470 nm DFB
29	CWDM, 1290 nm DFB	49	CWDM, 1490 nm DFB
31	CWDM, 1310 nm DFB	51	CWDM, 1510 nm DFB
33	CWDM, 1330 nm DFB	53	CWDM, 1530 nm DFB
35	CWDM, 1350 nm DFB	55	CWDM, 1550 nm DFB
37	CWDM, 1370 nm DFB	57	CWDM, 1570 nm DFB
39	CWDM, 1390 nm DFB	59	CWDM, 1590 nm DFB
41	CWDM, 1410 nm DFB	61	CWDM, 1610 nm DFB

Part Numbers:



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 (FP Laser) 62.5 / 125	-3	-22	19	1300	ST	22	1.3
3	Singlemode (FP Laser) 9 / 125	-3	-22	19	1310	ST, FC	22	30
7, CWDM	Singlemode (DFB Laser) 9 / 125	+1	-22	23	1550, CWDM -1550 Band	ST, FC	22	80
9, CWDM	Singlemode (DFB Laser) 9 / 125	+1	-22	23	1310, CWDM -1310 Band	ST, FC	22	60

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