

**Digitally Encoded One Channel  
10 Bit Video - Compatible with  
Panasonic WV-CW484S  
Dome Camera**



### **FEATURES:**

- Board-level Integral Fiber Transmitter Compatible with Panasonic Model WV-CW484S Dome Camera
- 10-bit Digitally-encoded Real-time Video Transmitter
- 10 Mhz Video Bandwidth
- Meets RS-250C Short Haul Transmission Specifications
- On-board Indicator Lights for Camera-independent Testing
- Wide Optical Dynamic Range: Eliminates Need for Optical Attenuators
- Obtains Power Directly From Camera Unit, No Need for Additional Electrical Cables
- SpectraView™ Video Diagnostics for Real-time Monitoring of Video Link
- SpectraSmart™ Network Management Compatible
- Both Singlemode and Multimode Versions Available
- Laser Based Systems for Both Multimode and Singlemode
- Surface Mount Technology (SMT) for High Reliability and Manufacturing Repeatability
- ST, FC Optical Connectors Available
- Laser Back-biased Photo Detector Circuitry for Stable Optical Output Over Full Temperature Range
- 10 Year Warranty

### **DESCRIPTION:**

Meridian's BT-1U-x product is a board-level printed circuit board fiber optic transmitter that integrates directly into the Panasonic WV-CW484S fixed-video dome camera. This transmitter card mounts inside the camera's housing and has both power and video coax interfaces to the camera providing a completely integrated solution. Since the transmitter board receives its power directly from the camera's supply voltage, there are no external electrical connections for the fiber card. No additional hardware is required to support this fiber card. The laser output on the transmitter is an active device with either an ST or FC optical interface. The optical cable is reliably secured into the device housing. 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. This product is also compatible with Meridian's SpectraSmart network management and diagnostic PC based software system. See the SpectraView and SpectraSmart documentation for additional information.

### **RECEIVER COMPATIBILITY:**

This transmitter is compatible with the following receivers:

SR-1U-x .....	1 channel receiver card
SR-3U-x .....	3 channel receiver card
MR-1U-x .....	1 channel receiver module
MR-3U-x .....	3 channel receiver module

### **MARKETS:**

✓ 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

Optical .....	ST (Multimode) ST or FC (Singlemode)
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### Compatible Receivers

SR-1U-x .....	1 channel receiver card
SR-3U-x .....	3 channel receiver card
MR-1U-x .....	1 channel receiver module
MR-3U-x .....	3 channel receiver module

### Power

Bare Transmitter Board	
12VDC or 24VAC .....	1.5 Watts

### Indicators (LEDs)

1 - Bi-color .....	Tx Signal Carrier/ Laser Over Current
1 - Bi-color .....	Tx Video Present / Sync Absent
1 - Bi-color .....	Rx Signal Lock Present / Error
1 - Bi-color .....	Rx Video Present / Overload
1 - Green .....	Rx Video Sync. Present

### Physical

Dimensions .....	70 mm (2.75") L, 35 mm (1.38") W 20mm (0.80") W
Weight .....	35 gms (1.24 Oz)

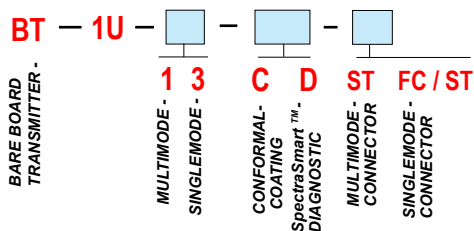
### Enviromental

Operating Temperature ...	-30°C to +60°C
Storage Temperature .....	-55°C to +85°C
Relative Humidity .....	0 to 95% Non-condensing

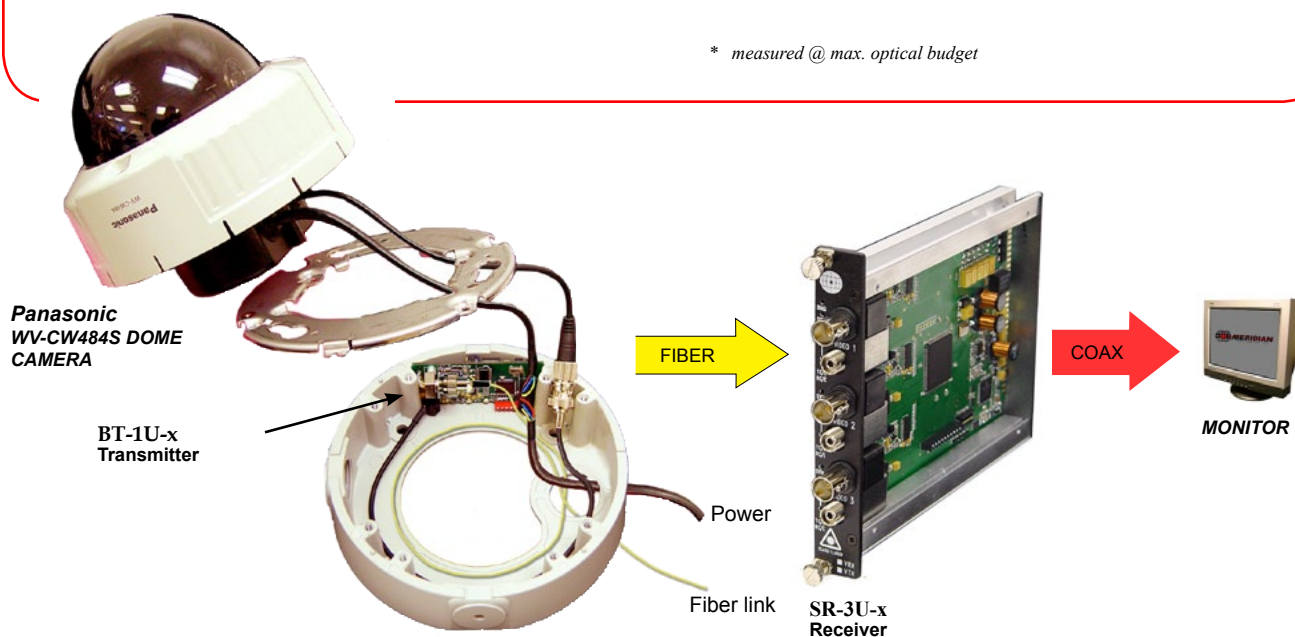
### Quality

MTBF .....	>200,000 hours @ Ground Fix 35°C per MIL217F
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### Part Numbers:



\* measured @ max. optical budget



## OPTICAL:

Fiber Type/Size (um)	Optical Output (dBm)	Receiver Sensitivity (dBm)	Optical Budget (dB)	Wavelength (nm)	Optical Connector	Optical Dynamic Range (dB)
Multimode (FP Laser) 62.5 / 125	-5	-25	20	1300 / 850	ST	24
Singlemode (FP Laser) 9 / 125	-5	-25	20	1310 / 1550	ST, FC	24