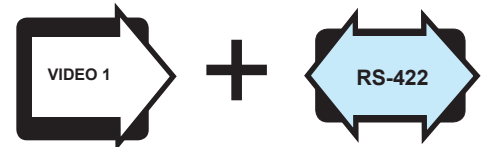


**Digitally Encoded One Channel 10 Bit Video
 & Full Duplex RS-422 Data - Compatible
 with Pelco SPECTRA III / IV Dome**



FEATURES:

- Board-level Integral Transmitter compatible with Pelco SPECTRA III / IV DOME camera
- 10 Bit Video Digital Encoding
- Real Time Video and Data Transmission
- 7 MHz Video Bandwidth
- Meets RS-250C Short Haul Transmission Specifications
- NTSC, PAL, SECAM Compatible
- Supports Pelco RS-422 Data Interface
- Wide Optical Dynamic Range: Eliminates Need For Optical Attenuators
- Laser Based Systems for Multimode and Singlemode
- Surface Mount Technology (SMT) for High Reliability and Repeatability
- *SpectraSmart™* Network Management Compatible
- Local LED Status Indicators to Monitor Critical System Diagnostics for Performance Parameters
- ST, FC Optical Connector
- Laser Back - Biased Photo Detector Circuitry for Stable Optical Output Over Full Temperature Range.
- Meets EIA RS-170, RS-343A Formats
- Screw Terminals Connectors for Data

DESCRIPTION:

Meridian's BT-1W1F/1F-P product, is a board-level Printed Circuit Board that integrates directly into the Pelco SPECTRA III / IV Dome camera with PTZ control. This unit plugs directly into the expansion plug inside the dome providing a fiber pigtail interface directly inside the dome thus eliminating the need for an external fiber transmitter and housing.

This transmitter is part of Meridian's DigiSlim™ product family and incorporates an all-digital encoding technology that transmits one real-time, simplex 10-bit video channel and one full-duplex RS-422 data channel, Manchester and, Bi-Phase data protocols as well as NTSC, PAL and SECAM video formats are all seamlessly supported. These single fiber, laser based system is available in both, Multimode and Singlemode modules. The DigiSlim™ series is also compatible with Meridian's *SpectraSmart* Network management and diagnostic PC based software system. See the *SpectraSmart* brochure for additional details.

Note: This system also available as a One Slot Card ST-1W1F/1F-P-xS.

RECEIVER COMPATIBILITY:

This transmitter is compatible with the following receivers:

SR-1W1F/1F-P-2M (multimode module)
 SR-1W1F/1F-P-2R (multimode card)
 SR-1W1F/1F-P-5M (singlemode module)
 SR-1W1F/1F-P-5R (singlemode card)

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 6.8 MHz @ -3 dB
Differential Gain	<0.6%
Differential Phase	<0.3°
SNR	>67 dB (weighted)*
Return Loss	>30 dB
Field Tilt	< 0.5%

Data

Formats	RS-422
Data Rate	DC to 125 Kb/s
Bit Error Rate	10 ⁻⁹ *

Optical

Fiber Data Rate	250 Mb/s
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Connectors

Optical	ST (Multimode)
	ST or FC (Singlemode)
Data	Screw Terminals

Compatible Receivers

SR-1W1F/1F-P-2S-R/M	Multimode
SR-1W1F/1F-P-5S-R/M	Singlemode

Power **

Card	3 Watts
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Indicators (LEDs)

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

Physical

Dimensions (Card)	160 mm (6.3") L, 127 mm (5") W
	20mm (0.80") W
Weight (Card)	450 gms (16 Oz)
No. of Slots	1
Module	See SR-500 Brochure

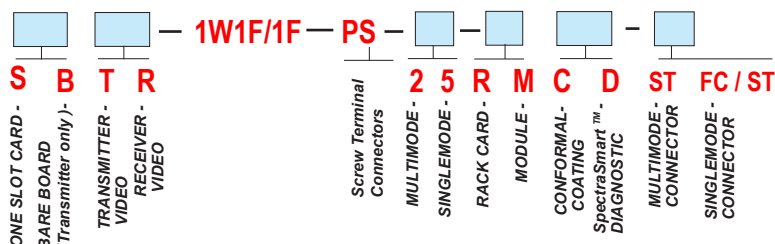
Enviromental

Operating Temperature ...	-40°C to +74°C
Storage Temperature	-55°C to +85°C
Relative Humidity	0 to 95% Non-condensing

Quality

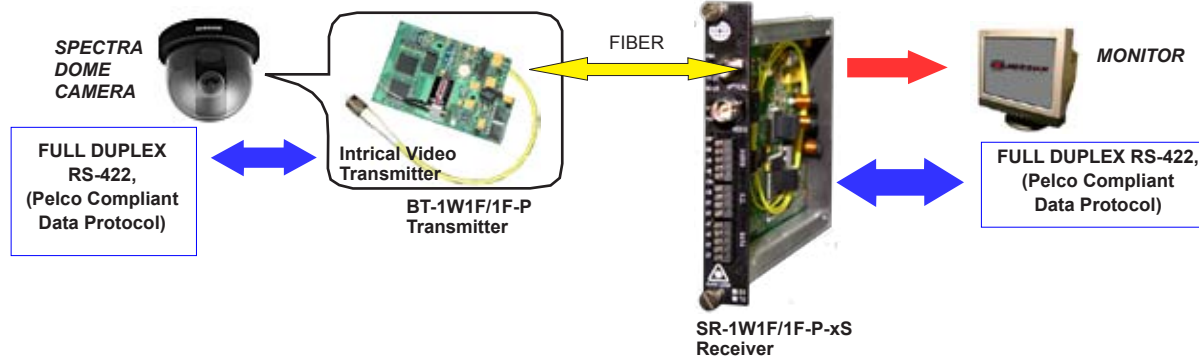
MTBF	>200,000 hours @ Ground Fix
	35°C per MIL217F

Part Numbers:



* measured @ max. optical budget

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



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	-26	21	1300 / 850	ST	24
Singlemode (FP Laser) 9 / 125	-5	-26	21	1310 / 1550	ST, FC	24

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