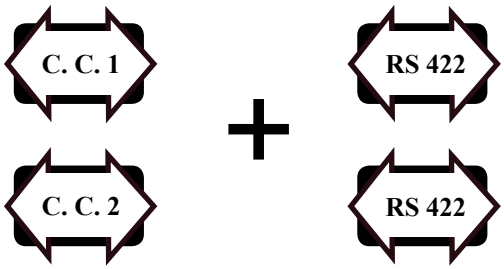
MERIDIAN TECHNOLOGIES

Digitally Encoded Two Bi-directional Contact Closure and Two Full Duplex RS-422 Data (Manchester, Bi-Phase)



FEATURES:

- One Slot Digital Module Design
- Real Time Contact Closure and Data Transmission
- Meets RS-250C Short Haul Transmission Specifications
- Two Full Duplex Contact Closure and RS-422 Data Channels
- 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
- Hot Swappable Cards
- Laser Back - Biased Photo Detector Circuitry for Stable Optical Output Over Full Temperature Range
- Meets EIA RS-170, RS-343A Formats
- DB25F connector for Contact/Data interfaces

DESCRIPTION:

This SX-2C2F/2C2F-55/57 and SX-2C2F/2C2F-57/55 products incorporate an all-digital encoding technology. They are transmit or receive 2 full-duplex Contact Closure channel and 2 RS-422 Data over two singlemode fibers. Manchester and Bi-Phase data protocol/formats are all supported. A standard DB25F connector is provided for the contact closure and data interface. These single fiber, laser based systems are available in both, Multimode and Singlemode modules.
This products are also compatible with Meridian's *SpectraSmart* Network management and diagnostic PC based system. See the *SpectraSmart* brochure for additional details.

Side **A**:
SX-2C2F/2C2F-55/57
a. 2-ch Contact Closure = Tx @ 1550nm & Rx @ 1570nm
b. 2-ch RS-422 Data = Tx @ 1550nm & Rx @ 1570nm

Side **B**:
SX-2C2F/2C2F-57/55
a. 2-ch Contact Closure = Rx @ 1550nm & Tx @ 1570nm
b. 2-ch RS-422 Data = Rx @ 1550nm & Tx @ 1570nm

CONFIGURATIONS:

The DigiSlim products is available as rack mount cards that can be installed in either Meridian's desk chassis or in 19" racking frames. Shelf/surface mount modules are also available. This system can be configured in either star (module to rack) or trunking (rack to rack) configurations. These systems can be made a standalone system by using the SR-500/S, SR-1000/s, 1 or 2 slot desk / wall mount chassis (87 VAC- 264VAC)

MARKETS:

- Intelligent transportation systems (ITS)
- Security and surveillance
- Access Control

SPECIFICATIONS:

Data

Formats	RS-422, Manchester, Bi-Phase
Data Rate	DC to 300Kb/s
Bit Error Rate	10^{-9}*

Contact Closure

Formats	Contact Closure
Rate	10 Hz.(Per Channel)
Bit Error Rate	10^{-9}*

Connectors

Video	75 Ohm BNC (Gold Center Pin)
Optical	ST, FC
Power (module)	See SR-500 Brochure for details
Data	3-pin Screw Terminal

Optical

Fiber Data Rate	250 Mb/s

Power **

Card	6 Watts

Indicators (LEDs)

1 - Green	Power On
1 - Bi-color	TX Carrier/ Laser Over Current
1 - Bi-color	RX Carrier - Present / Error
2 - Green	Tx Data Present
2 - Green	Rx Data Present
2 - Green	Contact Closure Present
2 - Green	Contact Closure 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

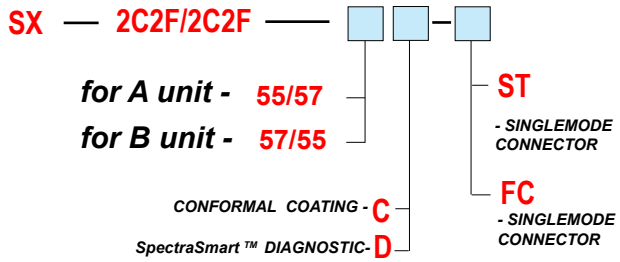
Enviromental

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

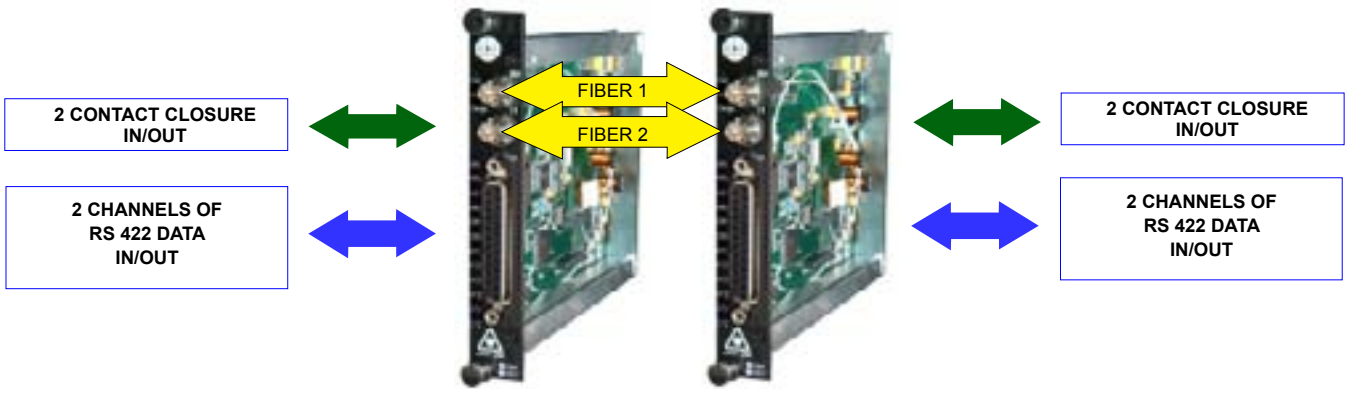
Quality

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

Part Numbers:



* *measured @ max. optical budget*
** *Due to variations of drivers and diagnostic options, power shown @ max value*



SX-2C2F/2C2F-55/57 Transceiver **SX-2C2F/2C2F-57/55 Transceiver**

OPTICAL:

Fiber Type/Size (um)	Optical Output (dBm)	Receiver Sensitivity (dBm)	Optical Budget (dB)	Wavelength (nm)	Optical Connector	Optical Dynamic Range (dB)
Singlemode (FP Laser) 9 / 125	-5	-26	21	1550 / 1570	ST, FC	24

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