Digitally Encoded Twelve Channels of Contact Closure

CONTACT CLOSURE 1

CONTACT CLOSURE 12
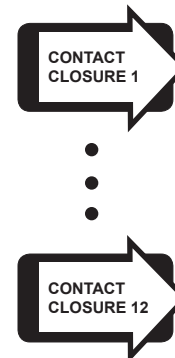
FEATURES:

- One Slot Digital Module Design

- Real Time DataTransmission

- 12 User-selectible, Contact Mapping (N.O, N.C)

- 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 and Performance Parameters

- ST, FC Optical Connector

- Hot Swappable Card

- Laser Back - Biased Photo Detector Circuitry for Stable Optical Output Over Full Temperature Range.

- Meets EIA RS-170, RS-343A Formats

- DB-25 Connector for Contact Closure

DESCRIPTION:

This module in the ST/SR-12C product family incorporates an all-digital encoding technology that transmits eight simplex contact closures. Convenient DB-25 connector is used for easy connection of the contact interface. Status indicators provide visual indication of the operational status of the contact. This single fiber, laser based system is available in both, Multimode and Singlemode modules.   The versatility of the ST/SR-12C series is enhanced by *SpectraView* selectable on-board contact closure test signal generator and *SpectraSmart,* an optional PC Based Network Diagnostic System. If greater diagnostic capability is required, the ST/SR-12C series is also available with Meridian's *SpectraSmart* Network management and diagnostic PC based system. See the *SpectraSmart* or *SpectraView* brochures for additional details.

CONFIGURATIONS:

The ST/SR-12C product family is available as rack mount cards and modules that can be installed in either Meridian's desk chassis or in 19" racking frames. 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. See subrack brochure for additional details.

MARKETS:

- ✓ Intelligent Transportation Systems (ITS)
- ✓ Security and surveillance
- ✓ Access Control

SPECIFICATIONS:

Contact Closure

Rate .... 10 Hz.(Per Channel)
Contact Rating .... 0.3A, 30V AC / DC
Contact Bounce Time .... 5 ms

Optical

Fiber Data Rate .... 25 Mb/s

Connectors

Optical .... ST, FC
Power (module) .... See SR-500 Brochure for details
Contact Closure .... DB-25 Connector

Quality

MTBF .... >180,000 hours @ Ground Fix
35°C per MIL217F

Enviromental

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

Power **

Card .... 4 Watts

Indicators (LEDs)

1 - Green .... Power On
1 - Bi-color .... TX Carrier/ Laser Over Current
1 - Bi-color .... RX Carrier - Present / Error
12 - Green .... Contact Closure Present

Physical

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

Part Numbers:

S [ ] ——— 12C ——— [ ] [ ] [ ]—[ ]

T — TRANSMITTER
R — RECEIVER

MULTIMODE - 1
SINGLEMODE 3, 7
MODULE - M
CONFORMAL COATING - C
SpectraSmart ™ DIAGNOSTIC- D

ST
- MULTIMODE CONNECTOR
FC or ST
- SINGLEMODE CONNECTOR

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

C.C 1 IN
⋮
C.C 12 IN

FIBER

ST-12C Transmitter

SR-12C Receiver

C.C 1 OUT
⋮
C.C 12 OUT
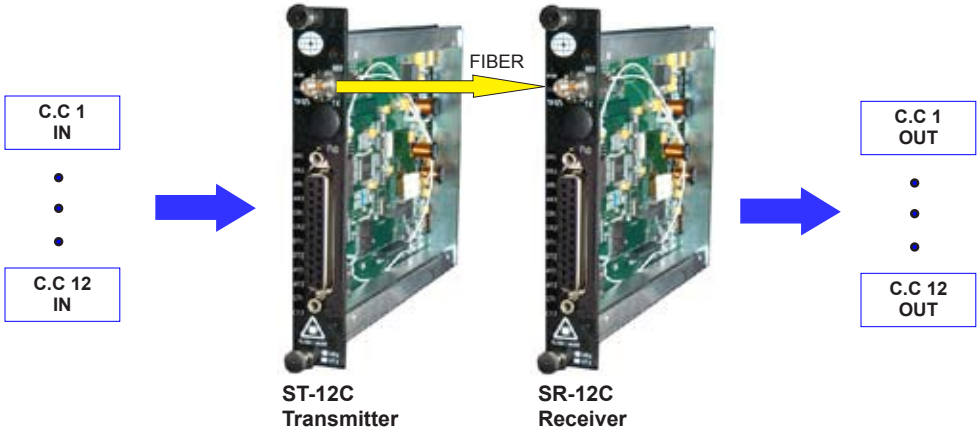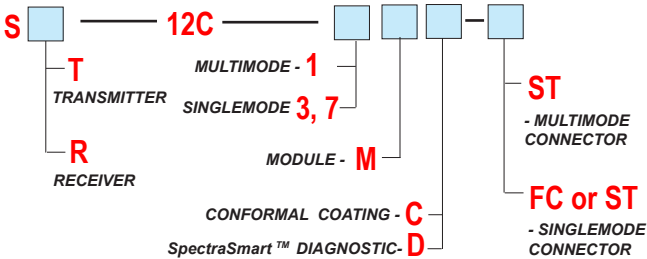
OPTICAL:

Fiber Type/Size (um)	Optical Output (dBm)	Receiver Sensitivity (dBm)	Optical Budget (dB)	Wavelength (nm)	Optical Connector	Optical Dynamic Range (dB)
(1) Multimode (FP Laser) 62.5 / 125	-5	-26	21	1300	ST	24
(3) Singlemode (FP Laser) 9 / 125	-5	-26	21	1310	ST, FC	24
(7) Singlemode (DFB Laser) 9 / 125	+3	-26	29	1550	ST, FC	24