Digitally Encoded Seven Channels of Contact Closure

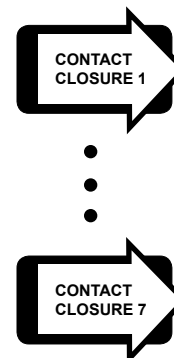CONTACT CLOSURE 1

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CONTACT CLOSURE 7

FEATURES:

- One Slot Digital Module Design

- Real Time DataTransmission

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

- Wide Optical Dynamic Range: Eliminates Need for Optical Attenuators

- Laser Based Systems for Multimode and Singlemode

- General Purpose Interface (GPI)

- 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

- Screw Terminal Connector for Contact Closure

DESCRIPTION:

This module in the ST/SR-7C-x product incorporates an all-digital encoding technology that transmits seven simplex contact closures.

The Contact Closure channels can be configured as either Normally Open (N.O.) or Normally Closed (N.C.).

Convenient Screw Terminal 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-7C-x product 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-7C-x 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 DigiSlim™ product family is available as rack mount cards and modules that can be installed in either Meridian's desk chassis and 1U or 3U standard 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 - MM(default), FC - SM(default)
Power (module) .... See SR-500 Brochure for details
Contact Closure .... Screw Terminal Connector

Quality

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

Enviromental

Operating Temperature ... -34ºC to +74ºC
Storage Temperature .... -55ºC to +85ºC
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
7 - 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

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

Part Numbers:

S ___ 7C ___ /
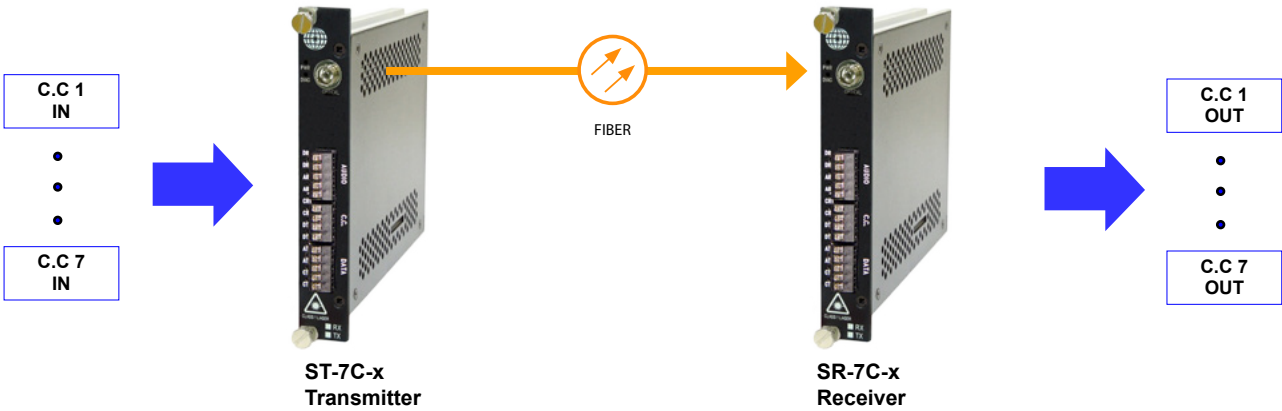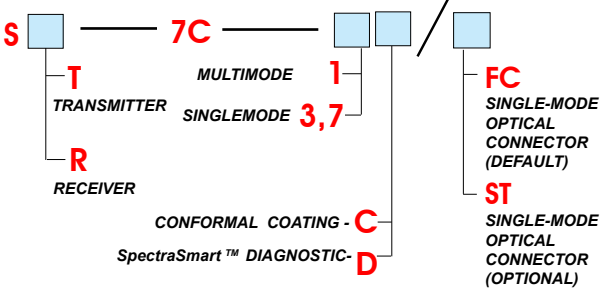T — TRANSMITTER
R — RECEIVER
MULTIMODE — 1
SINGLEMODE — 3,7
CONFORMAL COATING - C
SpectraSmart ™ DIAGNOSTIC- D
FC — SINGLE-MODE OPTICAL CONNECTOR (DEFAULT)
ST — SINGLE-MODE OPTICAL CONNECTOR (OPTIONAL)

C.C 1 IN
•
•
•
C.C 7 IN

ST-7C-x
Transmitter

FIBER

SR-7C-x
Receiver

C.C 1 OUT
•
•
•
C.C 7 OUT

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	-5	-26	21	1300	ST	24	7
3	Singlemode (FP Laser) 9 / 125	-5	-26	21	1310	ST, FC	24	60
7	Singlemode (DFB Laser) 9 / 125	+3	-26	29	1550	ST, FC	24	100