Digitally Encoded 4 Channels of Contact Closure

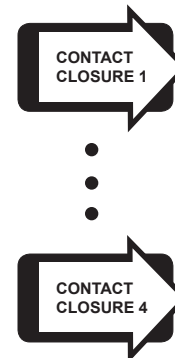CONTACT CLOSURE 1

CONTACT CLOSURE 4

FEATURES:

- One Slot Digital Module Design

- Real Time Data Transmission

- 4 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

- Screw Terminal Connectors for Contact Closure

DESCRIPTION:

This module in the ST/SR-4C-29/3 product family incorporates an all-digital encoding technology that transmits four simplex contact closures. Convenient Screw Terminal connectors 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 Singlemode modules. The versatility of the ST/SR-4C-29/3 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-4C-29/3 series is also available with Meridian's *SpectraSmart™* Network management and diagnostic PC based system. See the *SpectraSmart™* and *SpectraView™* brochures for additional details.

CONFIGURATIONS:

The ST/SR-4C-29/3 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

Power **

Card .... 4 Watts

Optical

Fiber Data Rate .... 25 Mb/s

Indicators (LEDs)

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

Connectors

Optical .... ST, FC
Power (module) .... See SR-500 Brochure for details
Contact Closure .... Screw Terminal Connectors

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

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

Part Numbers:

```
  S  [ ]  ——  4C  ——  X [ ]—[ ]
      |                |
      T                |
   TRANSMITTER      Tx unit - 29
      |             Rx unit - 3
      R
   RECEIVER
                CONFORMAL COATING - C
                SpectraSmart™ DIAGNOSTIC - D
                                    FC or ST
                                    - SINGLEMODE
                                      CONNECTOR
```
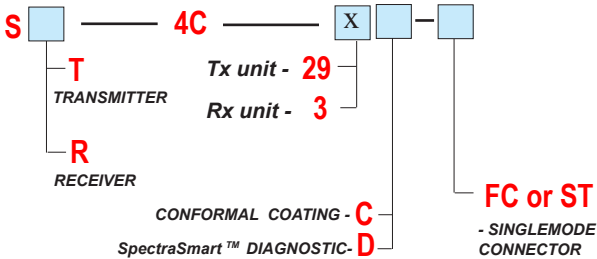
*   measured @ max. optical budget
** Due to variations of drivers and diagnostic options, power shown @ max value

```
C.C 1          ST-4C-29        SR-4C-3          C.C 1
IN             Transmitter     Receiver         OUT
  .          [FIBER →]                            .
  .                                               .
  .                                               .
C.C 4                                           C.C 4
IN                                              OUT
```

ST-4C-29
Transmitter

SR-4C-3
Receiver
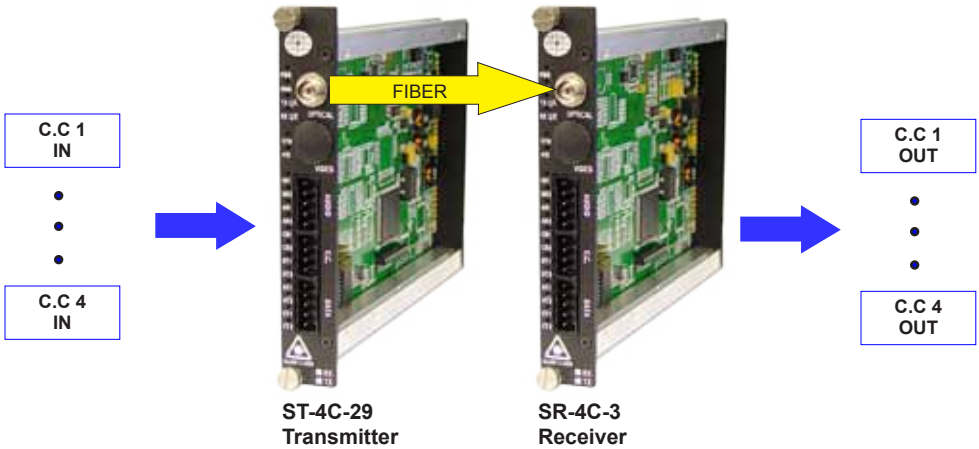
OPTICAL:

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	1290/1310	FC, ST	24