OTP-4C

Simplex or Duplex Contact Closure

DATASHEET FIBER OPTICS

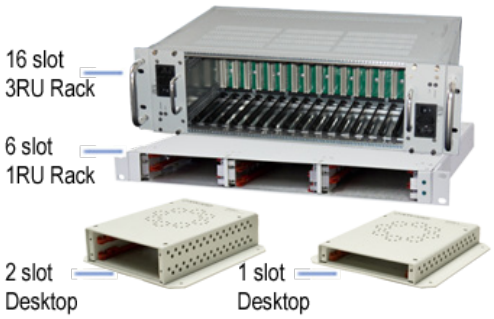
Features

- Simplex or duplex contact closure over fiber
- Multimode options (up to 2 km)
- Singlemode options (up to 70 km)
- TDM - Single Wavelength
- No EMI, RFI, or Ground Loops
- Micro DB-25 connector
- 3-Year Warranty

Applications

- Intelligent Transportation Systems
- Security & Surveillance
- Access Control
- Control Room

Enclosure Options



Simplex or Duplex Contact Closure

The Optiva OTP-4C provides for the transmission of 4 channels of simplex or duplex contact closure, over long or short distances, using a single fiber. EMCORE contact closure cards come in two types: "CC", which indicates latching operation (remembers the on/off position in the event of a loss of power) or "CF", which indicates non-latching operation.

In addition, the OTP-4C is part of our innovative Optiva video, audio and data media transport system. Optiva was designed to maintain lossless fiber extension between input and output signals. New signals may be added without the need for additional fiber through our proprietary daisy-chain technology. The Optiva line of products also includes insert cards for up to 16 channels of multiplexing / demultiplexing, 16x16 matrix switching, optical add / drop, as well as remote system monitoring.

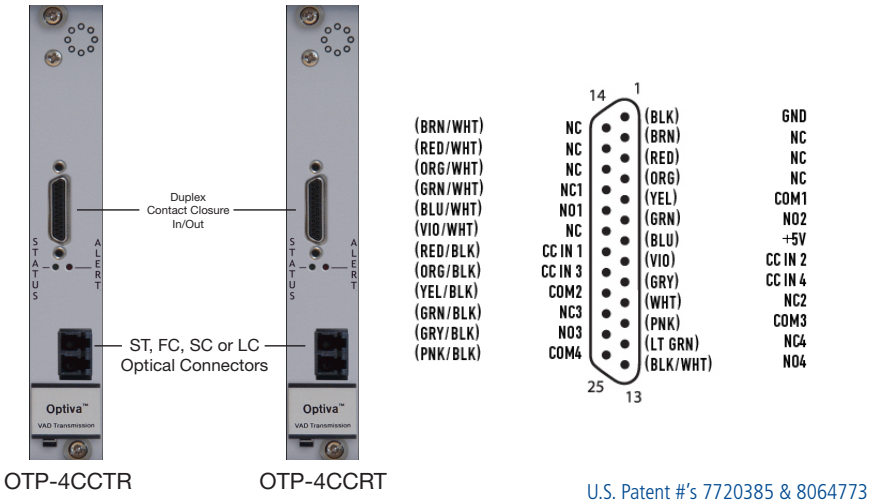
Optiva™ DAISY CHAIN TECHNOLOGY

System Design

optiva PLATFORM

Optiva insert cards support both 19" rackmount and compact tabletop or wall-mountable enclosures. The 3RU 19" rackmount enclosures (Models: OT-CC-16 & OT-CC-16F) can support up to 16 insert cards as well as dual-redundant, hot-swappable power supplies utilizing two 100 watt or two 200 watt power supplies. Also available in the rackmount form factor is our 1RU enclosure (Model: OT-CC-6-1U) which can accomodate six insert cards and utilizes two 60 watt power supplies. For desktop or wall mounting applications there are one-slot (Model: OT-DTCR-1) and two-slot (Model: OT-DTCR-2) enclosures. Both use an external wall mount power supply.

Connection Diagram



OTP-4CCTR OTP-4CCRT

U.S. Patent #'s 7720385 & 8064773

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OTP-4C

Simplex or Duplex Contact Closure

DATASHEET FIBER OPTICS

Simplex Models & Optical Specifications

Simplex Transmitter	Simplex Receiver
OTP-4CCT-*XX-YY*	OTP-4CCR-*XX-YY*
OTP-4CFT-*XX-YY*	OTP-4CFR-*XX-YY*

Optical Code "*XX*"	Fiber Type / Number	Wavelength (nm)	Min. Output Power (dBm)	Rx Sensitivity (dBm)	Optical Budget (db)	Distance (km)	Connector Options "*YY*"
A0	MM/1	850	-10	-17	7	0.5	LC, SC, ST, FC
A1	MM/1	1310	-5.5	-10.5	5	2	LC, SC, ST, FC
A2	SM/1	1310	-5.5	-12.5	7	10	LC, SC, ST, FC
A2D	SM/1	1310	-5.5	-17.5	12	20	LC, SC, ST, FC
A3	SM/1	1550	-3.5	-20.5	17	40	LC, SC, ST, FC
A3D	SM/1	1550	0	-25	25	60	LC, SC, ST, FC
L4*x*1	SM/1	1270 to 1610 (CWDM)	-2.5	-27.5	25	50 to 70	LC, SC, ST, FC

- CC is latching, CF is non-latching
- When ordering replace "*XX*" or "*XX/XX*" with one of the Optical Codes
- When ordering replace "*YY*" with one of the Connector Options
- When ordering CWDM, replace "*x*" in the Optical Code L4x1 with A (1270 nm), B (1290 nm), C (1310 nm), D (1330 nm), E (1350 nm), F (1370 nm), G (1390 nm), H (1410 nm), I (1430 nm), J (1450 nm), K (1470 nm), L (1490 nm), M (1510 nm), N (1530 nm), O (1550 nm), P (1570 nm), Q (1590 nm) or R (1610 nm)
- NOC: non-optical card
- Chromatic dispersion as well as other losses should also be taken into account
- Stated distances are the maximum range, shorter distance may require attentuation
- Standard connection type is UPC

Duplex Models & Optical Specifications

Duplex Transmitter	Duplex Receiver
OTP-4CCTR-*XX/XX-YY*	OTP-4CCRT-*XX/XX-YY*
OTP-4CFTR-*XX/XX-YY*	OTP-4CFRT-*XX/XX-YY*

Optical Code "*XX/XX*"	Fiber Type / Number	Wavelength (nm)	Min. Output Power (dBm)	Rx Sensitivity (dBm)	Optical Budget (db)	Distance (km)	Connector Options "*YY*"
A0/A0	MM/2	850	-10	-17	7	0.5	LC (Dual)
A1/A1	MM/2	1310	-5.5	-10.5	5	2	LC (Dual)
A2/A2	SM/2	1310	-5.5	-12.5	7	10	LC (Dual)
A2D/A2D	SM/2	1310	-5.5	-17.5	12	20	LC (Dual)
A3/A3	SM/2	1550	-3.5	-20.5	17	40	LC (Dual)
A3D/A3D	SM/2	1550	0	-25	25	60	LC (Dual)
L4*x*1/L4*x*1*	SM/2	1270 to 1610 (CWDM)	-2.5	-27.5	25	50 to 70	LC (Dual)
A1/A3M*	MM/1	1310/1550	-5.5	-10.5	5	3	SC, FC or ST
A2/A3*	SM/1	1310/1550	-5.5	-17.5	12	20	SC, FC or ST
A2/A3D*	SM/1	1310/1550	-3.5	-20.5	17	40	SC, FC or ST
A2/A3H*	SM/1	1310/1550	-2.5	-27.5	25	60	SC, FC or ST

- *Use "*XX/XX*" as is for ordering transmitter models but reverse for ordering receiver models

General

Specifications	Values
Dimensions (Insert Card)	6.69"L x 0.81"W x 5.06"H
Weight	11 oz.
Operating Temperature	-20˚C to +55˚C
Storage Temperature	-40˚C to +85˚C
Humidity	0 to 95% (Non-Condensing)
Operating Voltage	12 VDC
Power Consumption	6 Watts
Bit Error Rate	10^{-14}
System Latency	< 1 ms
Warranty	3 year

Contact Specifications

Specifications	Values
Input Impedance	7K Ohms pulled down
Input Control Signal Frequency	10 Hz max
Active Input	High
Input Range High	2.5V<Vinh<24V
Input Range Low	0V < Vinl < 0.8V
Local Vinh Pin	Pin # 7 is +5 VDC, for use with a switch

Contact Characteristics

Specifications	Values
Type:	3 pin: Normally Open, Normally Closed and Common
Short Circuit Protection	160 mA max (internal auto resetting fuse trips at 450 mA at 25C)
Input Voltage	48 VDC max

Monitoring & Control

Specifications	Values
Local	Front panel LED status and alert indicators
Remote	OptivaView SNMP Management Suite*

- Requires OptivaView SNMP Controller Card (Model: OPV-CTLR)

Compliance

239267

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