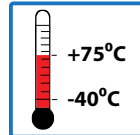
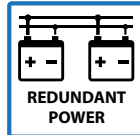


**HARDENED 2-PORT MEDIA CONVERTER WITH
 1x10/100/1000BASE-T(X) RJ-45 PORT, 1x1000BASE-T SFP PORT
 AND 4 PORT CWDM INTERFACE**



CM-1RE-x
MUX CARD

CD-1RE-x
DEMUX CARD

MEDIA CONVERTER

FEATURES

- 10/100/1000Base-T Ethernet Auto-negotiation
- Full Duplex or Half-duplex Supported
- IEEE 802.3 Compliant
- NTCIP Compatible
- Far End Fault Function
- Link Fault Pass-through Function
- SpectraSmart™ Network Management Compatible
- FC Optical Connectors Standard, ST/SC Optional
- Built-in CWDM Interface for External Video, Audio, Data Signals Transmission
- Hot Swappable Rack Cards
- SFP Speed Detect
- Auto MDI/MDIX
- Jumbo Frames Support

DESCRIPTION

The CM-1RE-x and CD-1RE-x (single-slot rack cards) are Ethernet transceivers designed for Bi-directional transmission of 10Base-T Ethernet / 100Base-T Fast Ethernet / 1000Base-T Gigabit Ethernet data over one singlemode fiber.

In addition, Built-in CWDM interface make it possible to connect any Meridian's card or module with SFP optic, to transmit Video, Data and Audio signals along with Ethernet data. MUX and DEMUX cards should be used in pairs.

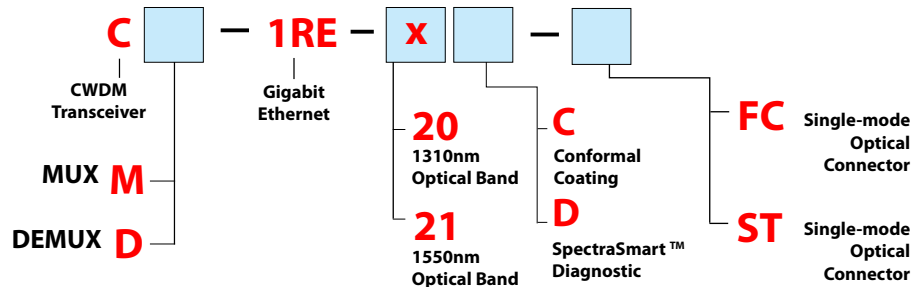
Since the data rate is auto-negotiated, no internal adjustments or setting are necessary. Distances of 20km can be obtained using singlemode fiber.

These cards are environmentally hardened and will operate over the standard NEMA TS-2 temperature range - suitable for outdoor installations. Standard shielded RJ-45 connectors are provided for CAT 5 compliance.

This units are 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, SR-1000, 1 or 2 slot desk/wall mount chassis (87VAC- 264VAC).

SPECIFICATIONS

Physical Ports		DIAG	1 - Card diagnostic (Green - OK, Red - alarm)
10/100/1000Base-T(X) Port in RJ45 Auto MDI/MDIX	1	LINK	1 - Copper connection established (Green)
1000Base-FX SFP port	1	ACT	1 - Copper port activity (Green)
CWDM Interface, LC connector	4	TX	1 - Optical carrier output (Green)
FC (default), ST optical connectors	1	RX	1 - Optical carrier input (Green)
Technology GigE Ethernet		Physical Characteristic	
Ethernet Standards	IEEE 802.3 CSMA/CD IEEE 802.3i 10Base-T IEEE 802.3u 100Base-T IEEE 802.3ab 1000Base-T	Enclosure	Rack Card
Data Rate	10/100/1000 Mb/s	Dimension (W x D x H)	20 (W) x 127 (D) x 160 (H) mm (0.8 x 5.0 x 6.3 inch)
Bit Error Rate	Better than 10 ⁻⁹	Weight (g)	450 g
Fiber Data Rate	1250 Mb/s	Environmental	
CWDM Interface		Storage Temperature	-40 to 85°C (-40 to 185°F)
Insertion Loss	1.5 dB	Operating Temperature	-40 to 75°C (-40 to 167°F)
Isolation	> 20 dB	Operating Humidity	5% to 95% Non-condensing
Return Loss	> 30 dB	Regulatory approvals	
Wavelength (optic code 20)	1270/1290/1310/1330 nm	EMI	FCC Part 15, CISPR (EN55022) class A
Wavelength (optic code 21)	1510/1530/1550/1570 nm	EMS	EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN61000-4-11
LED indicators		Shock	IEC60068-2-27
Power On	1 - Green (normal) - when power is applied to the module	Free Fall	IEC60068-2-32
		Vibration	IEC60068-2-6
		Safety	EN60950-1



Optical Specifications								
Optical Code	Fiber Type/Size (um)	Optical Out-put (dBm)	Receiver Sensitivity (dBm)	Optical Budget (dB)	Wavelength (nm)	Optical Con- nector	Optical Dynamic Range (dB)	Estimated Transmission Distance (km)
20	Singlemode (DFB Laser) 9 / 125	-5	-24	19	1310 Band	FC, ST	24	20*
21	Singlemode (DFB Laser) 9 / 125	-5	-24	19	1550 Band	FC, ST	24	20*

* Optical devices with higher distances are available on customer request.

Ordering Information	
Description	CM-1RE-x - Hardened 2-port Media Converter with 1x10/100/1000Base-T(X) RJ-45 port, 1x1000Base-T SFP port and 4 Port CWDM Interface MUX CD-1RE-x - Hardened 2-port Media Converter with 1x10/100/1000Base-T(X) RJ-45 port, 1x1000Base-T SFP port and 4 Port CWDM Interface DEMUX