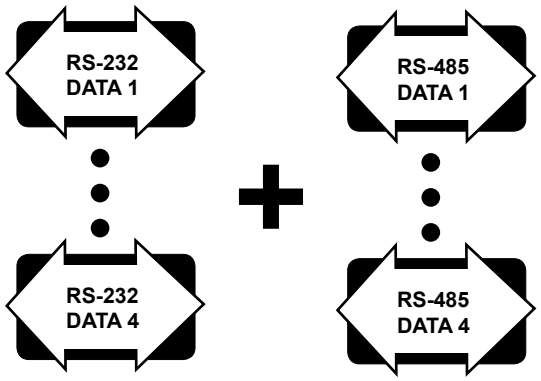
MERIDIAN TECHNOLOGIES

DX-4D6J-CWDM

DigiFlex™

Digital Full Duplex Four RS-232 Data Channels and Six Full Duplex RS-485 (2 wire) Data Channels, over Two Fibers



FEATURES:

- 4 Channels of Full Duplex RS-232 Data & 6 Channels of Full Duplex RS 485 (2 wire) over two singlemode fibers
- 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
- SpectraSmartTM Network Management Compatible
- Local LED Status Indicators to Monitor Critical System Diagnostics for Performance Parameters
- ST, FC Optical Connector
- Hot Swappable Cards
- Laser Back - Biased Photo Detector Circuitry for
- Stable Optical Output Over Full Temperature Range
- Meets NEMA TS1 / TS2 & CALTRANS Specs.
- DB 9 Type Connector for Data
- DC to 1 Mb/s Data Rate

DESCRIPTION:

The DX-4D6J-CWDM series fiber optic transmission system that utilizes Meridian's new digital encoding technology to transport following signals:

- Four channels RS-232 TRx
- Six channels RS-485 (2-wire) TRx

This product is available for transmitting any one of the industry standard CWDM wavelengths from 1270nm through 1610nm over one, singlemode fiber with either an ST or FC optical connector. The transmitter will interface with any standard CWDM multiplexer to efficiently add it to the overall wavelength plan of the fiber system. It is ideally suited to Meridian's 4 & 8 channel CWDM multiplexer (CWDM-4 & CWDM-8). See the appropriate data sheets for detailed information about these wavelength multiplexer products.

The functionality of DX-4D6J-CWDM series is further enhanced by its compatibility with Meridian's PC based SpectraSmart™, Network Management and Remote Diagnostic Software System. SpectraSmart supervises the operating parameters of the transmission system such as status on video levels, sync, carrier detect, voltage, temperature, optical levels, data present etc. See the SpectraSmart brochure for more details.

CONFIGURATIONS:

The DX-4D6J-CWDM system is available as rack mount cards and modules that can be installed in all of Meridian's card chassis, desk chaises and 19" racking frames. These 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-1000/S, 2 slot desk / wall mount chassis (87VAC-264VAC)

MARKETS:

√ Security and Surveillance
√ Access Control Systems
√ Intercomms

SPECIFICATIONS:

Data

Formats	RS-232, RS-485 (2 wire)
Data Rate (RS-232)	DC to 125Kb/s * (Per Channel)
Data Rate (RS-485)	DC to 1Mb/s* (Per Channel)
Bit Error Rate	10-9*

Optical

Fiber Data Rate	270 Mb/s

Connectors

Video	75 Ohm BNC (Gold Center Pin)
Optical	ST, FC
Power	See SR-1000 Brochure for details
Data & Audio	DB9 Female

Power **

Card	8 Watts

Quality

MTBF	>240,000 hours @ Ground Fix 35°C per MIL217F

Indicators (LEDs)

1 - Green	Power On
1 - Bi-color	TX Carrier/ Laser Over Current
1 - Bi-color	RX Carrier - Present / Error
1 - Bi-color	RX optical signal - Present / Absent
20 - Green	Data Present

Physical

Dimensions:	
Card	160 mm (6.3") L, 100 mm (4") W
	44 mm (1.7") H
Weight:	
Card	450 gms (16 Oz)
No. of Slots	2

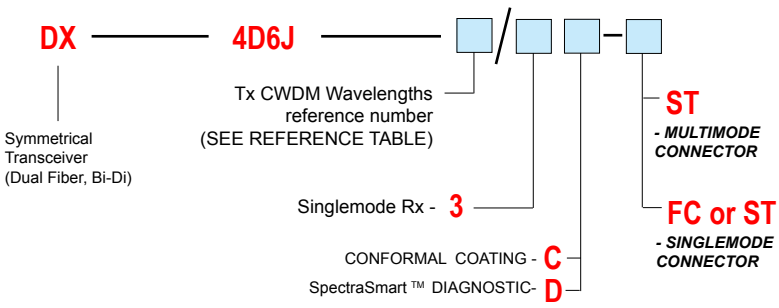
Enviromental

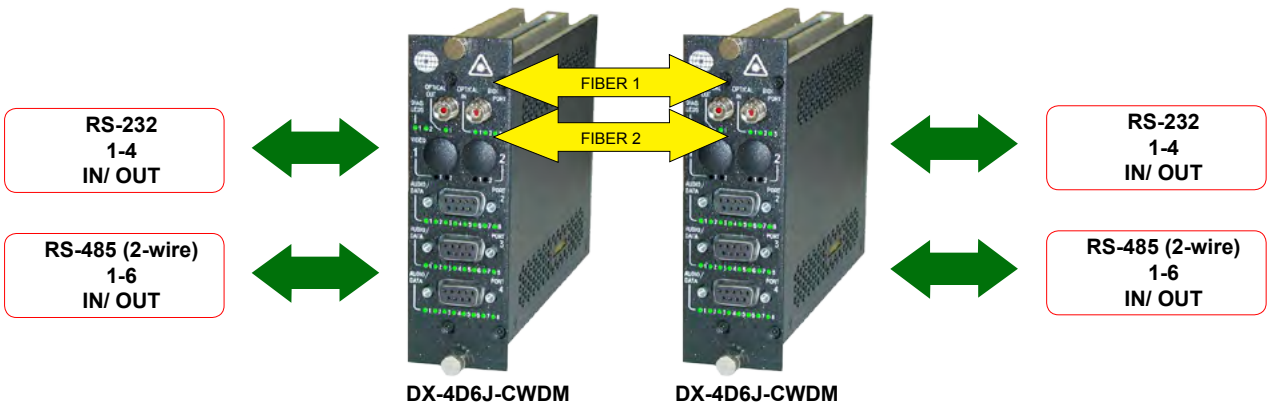
Operating Temperature	-34°C to +74°C
Storage Temperature	-55°C to +85°C
Relative Humidity	0 to 95% Non-condensing

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

REFERENCE NUMBER	WAVELEGNTH
27	CWDM, 1270 nm DFB Laser
29	CWDM, 1290 nm DFB Laser
31	CWDM, 1310 nm DFB Laser
33	CWDM, 1330 nm DFB Laser
35	CWDM, 1350 nm DFB Laser
37	CWDM, 1370 nm DFB Laser
39	CWDM, 1390 nm DFB Laser
41	CWDM, 1410 nm DFB Laser
47	CWDM, 1470 nm DFB Laser
49	CWDM, 1490 nm DFB Laser
51	CWDM, 1510 nm DFB Laser
53	CWDM, 1530 nm DFB Laser
55	CWDM, 1550 nm DFB Laser
57	CWDM, 1570 nm DFB Laser
59	CWDM, 1590 nm DFB Laser
61	CWDM, 1610 nm DFB Laser
3	Singlemode 1270-1610 Rx

Part Numbers:





OPTICAL:

Fiber Type/Size (um)	Optical Output (dBm)	Receiver Sensitivity (dBm)	Optical Budget (dB)	Wavelength (nm)	Optical Connector	Optical Dynamic Range (dB)	Estimated Maximum Transmission Distance (km)
Singlemode (DFB Laser) 9 / 125	+1	-26	27	1270-1610	ST, FC	24	75

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