CM-600 Module Series

4-port Fast Ethernet interface modules for the EDS-600 Series

Features and Benefits

- Modular design with 4-port copper/fiber combinations

- Hot-swappable media modules for continuous operation

Certifications

Introduction

The CM-600 Module Series has been designed for use with the EDS-600 Series. The CM-600 Series has a compact modular design with one slot that accommodates 4 ports, which support multiple media types including TX, MSC, SSC, and MST. The CM-600-4TX-BP module supports the bypass relay function on each port and the CM-600-4TX-PTP module supports the hardware IEEE 1588 PTPv2 protocol on each port. The modular design ensures that the EDS-600 Series can meet multiple application requirements.

Specifications

Ethernet Interface

10/100BaseT(X) Ports (RJ45 connector)	CM-600-4TX: 4 CM-600-4TX-BP: 4, with bypass relay CM-600-4TX-PTP: 4, with hardware-based PTP CM-600-1TX Series: 1 CM-600-2TX Series: 2 All models support: Auto negotiation speed Full/Half duplex mode Auto MDI/MDI-X connection
100BaseFX Ports (multi-mode SC connector)	CM-600-4MSC: 4 CM-600-3MSC/1TX: 3 CM-600-2MSC/2TX: 2
100BaseFX Ports (multi-mode ST connector)	CM-600-4MST: 4 CM-600-3MST/1TX: 3 CM-600-2MST/2TX: 2
100BaseFX Ports (single-mode SC connector)	CM-600-4SSC: 4 CM-600-3SSC/1TX: 3 CM-600-2SSC/2TX: 2

Time Management	CM-600-4TX-PTP: IEEE 1588v2 PTP (hardware-based)

Optical Fiber

		100BaseFX	
		Multi-Mode	Single-Mode
Fiber Cable Type	OM1	50/125 µm	G.652
		800 MHz x km	
Typical Distance		4 km	5 km	40 km

Wavelength	Typical (nm)	1300	1310
	TX Range (nm)	1260 to 1360	1280 to 1340
	RX Range (nm)	1100 to 1600	1100 to 1600
Optical Power	TX Range (dBm)	-10 to -20	0 to -5
	RX Range (dBm)	-3 to -32	-3 to -34
	Link Budget (dB)	12	29
	Dispersion Penalty (dB)	3	1

Note: When connecting a single-mode fiber transceiver, we recommend using an attenuator to prevent damage caused by excessive optical power.
Note: Compute the "typical distance" of a specific fiber transceiver as follows: Link budget (dB) > dispersion penalty (dB) + total link loss (dB).

Power Parameters

Power Consumption	CM-600-4TX: 0.61 W (max.) CM-600-2TX models: 1.56 W (max.) CM-600-1TX models: 2 W (max.) CM-600-4MSC/4MST/4SSC: 2.44 W (max.) CM-600-4TX-PTP: 3.46 W (max.) CM-600-4TX-BP: 2.38 W (max.)

Physical Characteristics

IP Rating	IP30
Dimensions	29.7 x 144.4 x 144.8 mm (1.17 x 5.69 x 5.7 in)
Weight	CM-600-4TX: 190 g (0.42 lb) CM-600/1TX, CM-600/2TX models: 230 g (0.51 lb) CM-600-4MSC/4MST/4SSC/4TX-BP: 240 g (0.53 lb) CM-600-4TX-PTP: 185 g (0.41 lb)

Environmental Limits

Operating Temperature	-40 to 75°C (-40 to 167°F)
Storage Temperature (package included)	-40 to 85°C (-40 to 185°F)
Ambient Relative Humidity	5 to 95% (non-condensing)

MTBF

Time	740,661 hrs
Standards	Telcordia (Bellcore), GB

Warranty

Warranty Period	5 years
Details	See www.moxa.com/warranty

Package Contents

Device	1 x CM-600 Series module
Documentation	1 x warranty card

Dimensions

Unit: mm (inch)

Top View

Side View

Front View
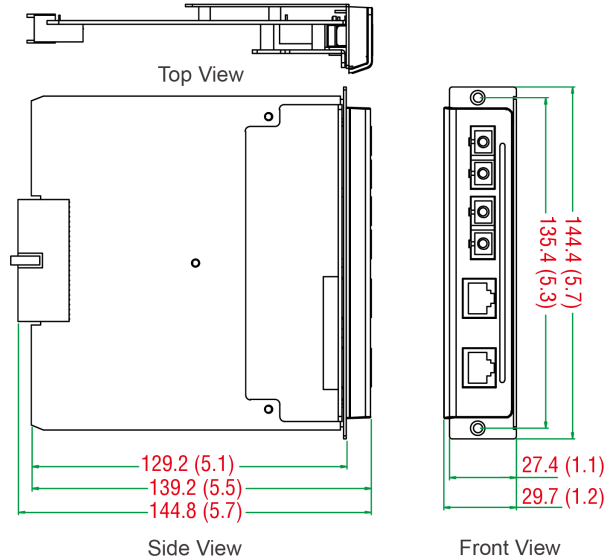
Ordering Information

Model Name	10/100BaseT(X) Ports RJ45 Connector	100BaseFX Ports Multi-Mode SC Connector	100BaseFX Ports Multi-Mode ST Connector	100BaseFX Ports Single-Mode SC Connector	Operating Temp.
CM-600-4TX	4	–	–	–	-40 to 75°C
CM-600-4TX-BP	4, with bypass relay	–	–	–	-40 to 75°C
CM-600-4TX-PTP	4, with hardware-based PTP	–	–	–	-40 to 75°C
CM-600-4MSC	–	4	–	–	-40 to 75°C
CM-600-4MST	–	–	4	–	-40 to 75°C
CM-600-4SSC	–	–	–	4	-40 to 75°C
CM-600-3MSC/1TX	1	3	–	–	-40 to 75°C
CM-600-3MST/1TX	1	–	3	–	-40 to 75°C
CM-600-3SSC/1TX	1	–	–	3	-40 to 75°C
CM-600-2MSC/2TX	2	2	–	–	-40 to 75°C
CM-600-2MST/2TX	2	–	2	–	-40 to 75°C
CM-600-2SSC/2TX	2	–	–	2	-40 to 75°C