## 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

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## 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
$\left.\left.\begin{array}{|l|l}\hline \text { 10/100BaseT(X) Ports (RJ45 connector) } & \begin{array}{l}\text { CM-600-4TX: } 4 \\ \text { CM-600-4TX-BP: 4, with bypass relay } \\ \text { CM-600-4TX-PTP: 4, with hardware-based PTP } \\ \text { CM-600-1TX Series: } 1\end{array} \\ \text { CM-600-2TX Series: } 2\end{array}\right\} \begin{array}{ll}\text { All models support: } \\ \text { Auto negotiation speed } \\ \text { Full/Half duplex mode } \\ \text { Auto MDI/MDI-X connection }\end{array}\right]$

Time Management

Optical Fiber

CM-600-4TX-PTP: IEEE 1588 v 2 PTP (hardware-based)

|  |  | 100BaseFX |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Multi-Mode |  | Single-Mode |
| Fiber Cable Type |  | OM1 | 50/125 $\mu \mathrm{m}$ | G. 652 |
|  |  | 800 MHz x km |  |
|  | ical Distance |  | 4 km | 5 km | 40 km |
| Wavelength | Typical (nm) |  | 1300 | 1310 |
|  | TX Range ( nm ) |  | to 1360 | 1280 to 1340 |
|  | RX Range ( nm ) |  | to 1600 | 1100 to 1600 |
| Optical <br> Power | TX Range (dBm) |  | to -20 | 0 to -5 |
|  | RX Range ( dBm ) |  | 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 $(\mathrm{dB})>$ dispersion penalty $(\mathrm{dB})+$ total link loss (dB).

## Power Parameters

Power Consumption

Physical Characteristics

| IP Rating | IP30 |
| :---: | :---: |
| Dimensions | $29.7 \times 144.4 \times 144.8 \mathrm{~mm}(1.17 \times 5.69 \times 5.7 \mathrm{in})$ |
| Weight | $\begin{aligned} & \text { CM-600-4TX: } 190 \mathrm{~g}(0.42 \mathrm{lb}) \\ & \text { CM-600/1TX, CM-600/2TX models: } 230 \mathrm{~g}(0.51 \mathrm{lb}) \\ & \text { CM-600-4MSC/4MST/4SSC/4TX-BP: } 240 \mathrm{~g}(0.53 \mathrm{lb}) \\ & \text { CM-600-4TX-PTP: } 185 \mathrm{~g}(0.41 \mathrm{lb}) \end{aligned}$ |
| Environmental Limits |  |
| Operating Temperature | -40 to $75^{\circ} \mathrm{C}\left(-40\right.$ to $\left.167^{\circ} \mathrm{F}\right)$ |
| Storage Temperature (package included) | -40 to $85^{\circ} \mathrm{C}\left(-40\right.$ to $\left.185{ }^{\circ} \mathrm{F}\right)$ |
| 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

## Documentation

## $1 \times$ CM-600 Series module

$1 \times$ warranty card

## Dimensions

Unit: mm (inch)


## 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 $75^{\circ} \mathrm{C}$ |
| CM-600-4TX-BP | 4, with bypass relay | - | - | - | -40 to $75^{\circ} \mathrm{C}$ |
| CM-600-4TX-PTP | 4, with hardware-based PTP | - | - | - | -40 to $75^{\circ} \mathrm{C}$ |
| CM-600-4MSC | - | 4 | - | - | -40 to $75^{\circ} \mathrm{C}$ |
| CM-600-4MST | - | - | 4 | - | -40 to $75^{\circ} \mathrm{C}$ |
| CM-600-4SSC | - | - | - | 4 | -40 to $75^{\circ} \mathrm{C}$ |
| CM-600-3MSC/1TX | 1 | 3 | - | - | -40 to $75^{\circ} \mathrm{C}$ |
| CM-600-3MST/1TX | 1 | - | 3 | - | -40 to $75^{\circ} \mathrm{C}$ |
| CM-600-3SSC/1TX | 1 | - | - | 3 | -40 to $75^{\circ} \mathrm{C}$ |
| CM-600-2MSC/2TX | 2 | 2 | - | - | -40 to $75^{\circ} \mathrm{C}$ |
| CM-600-2MST/2TX | 2 | - | 2 | - | -40 to $75^{\circ} \mathrm{C}$ |
| CM-600-2SSC/2TX | 2 | - | - | 2 | -40 to $75^{\circ} \mathrm{C}$ |

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