

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 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-600-1TX 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 |

| 100BaseFX Ports (single-mode SC connector) | CM-600-4SSC: 4 CM-600-3SSC/1TX: 3 CM-600-2SSC/2TX: 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|--------------|------|--------------|--|--|------------|--|-------------|------------------|-----|-----------|--|-------|--------------|--|------------------|--|------|------|-------|------------|--------------|------|--|------|---------------|--------------|--|--------------|---------------|--------------|--|--------------|---------------|----------------|------------|--|---------|----------------|-----------|--|-----------|------------------|----|--|----|-------------------------|---|--|---|
| Optical Fiber | <table border="1"> <thead> <tr> <th colspan="2" rowspan="2"></th> <th colspan="3">100BaseFX</th> </tr> <tr> <th colspan="2">Multi-Mode</th> <th>Single-Mode</th> </tr> <tr> <th rowspan="2">Fiber Cable Type</th> <th rowspan="2">OM1</th> <th colspan="2">50/125 μm</th> <th rowspan="2">G.652</th> </tr> <tr> <th colspan="2">800 MHz x km</th> </tr> </thead> <tbody> <tr> <td colspan="2">Typical Distance</td> <td>4 km</td> <td>5 km</td> <td>40 km</td> </tr> <tr> <td rowspan="3">Wavelength</td> <td>Typical (nm)</td> <td colspan="2">1300</td> <td>1310</td> </tr> <tr> <td>TX Range (nm)</td> <td colspan="2">1260 to 1360</td> <td>1280 to 1340</td> </tr> <tr> <td>RX Range (nm)</td> <td colspan="2">1100 to 1600</td> <td>1100 to 1600</td> </tr> <tr> <td rowspan="4">Optical Power</td> <td>TX Range (dBm)</td> <td colspan="2">-10 to -20</td> <td>0 to -5</td> </tr> <tr> <td>RX Range (dBm)</td> <td colspan="2">-3 to -32</td> <td>-3 to -34</td> </tr> <tr> <td>Link Budget (dB)</td> <td colspan="2">12</td> <td>29</td> </tr> <tr> <td>Dispersion Penalty (dB)</td> <td colspan="2">3</td> <td>1</td> </tr> </tbody> </table> <p>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).</p> | | | 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 |
| | | | | 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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.) |
|-------------------|--|

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: 240 g (0.53 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

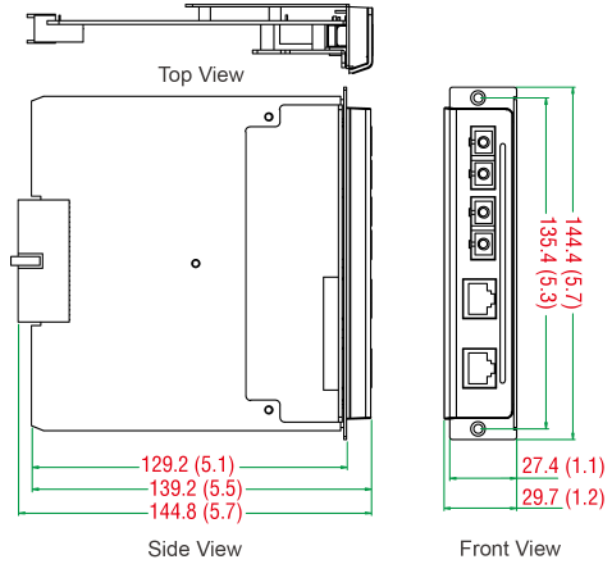
| | |
|-----------------|--|
| Warranty Period | 5 years |
| Details | See www.moxa.com/warranty |

Package Contents

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

Dimensions

Unit: mm (inch)



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-600-4MSC | - | 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-600-3SSC/1TX | 1 | - | - | 3 | -40 to 75°C |
| CM-600-2MSC/2TX | 2 | 2 | - | - | -40 to 75°C |
| CM-600-2SSC/2TX | 2 | - | - | 2 | -40 to 75°C |

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