

Regulatory Approvals

- FCC Class A
- UL 1950
- CSA 22 No. 950
- EN60950
- CE
 - EN55022 Class B
 - EN50082-1

Canadian EMI Notice

This Class A digital apparatus meets all the requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

European Notice

Products with the CE Marking comply with both the EMC Directive (89/336/EEC) and the Low Voltage Directive (73/23/EEC) issued by the commission of the European Community. Compliance with these directives implies conformity to the following European Norms:

- EN55022 (CISPR 22) - Radio Frequency Interference
- EN50082-1 (IEC801-2, IEC801-3, IEC801-4) - Electromagnetic Immunity
- EN60950 (IEC950) - Product Safety

Five-Year Limited Warranty

MiLAN Technology warrants to the original consumer or purchaser that each of its products, and all components thereof, will be free from defects in material and/or workmanship for a period of five years from the original factory shipment date. Any warranty hereunder is extended to the original consumer or purchaser and is not assignable.

MiLAN Technology makes no express or implied warranties including, but not limited to, any implied warranty of merchantability or fitness for a particular purpose, except as expressly set forth in this warranty. In no event shall MiLAN Technology be liable for incidental or consequential damages, costs, or expenses arising out of or in connection with the performance of the product delivered hereunder. MiLAN Technology will in no case cover damages arising out of the product being used in a negligent fashion or manner.

To Contact MiLAN Technology

For prompt response when calling for service information, have the following information ready:

- Product serial number and rev.
- Date of purchase
- Vendor or place of purchase

You can reach MiLAN Technical Support at 408/744-2751
Or E-mail at support@milan.com



Address: 1299 Orleans Drive
Sunnyvale, CA 94089
Voice: 408/744-2775
Fax: 408/744-2793
Web: www.milan.com

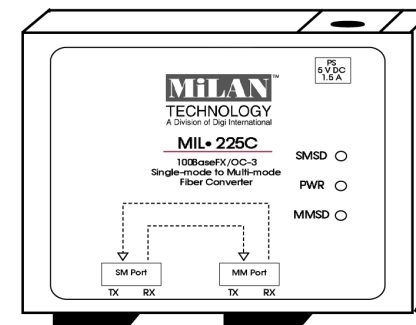


MIL-225C

100BaseFX/OC-3

Single-mode to Multi-mode

Fiber Converter



Installation Guide

Multi-mode to Single-mode
and
Single-mode to Multi-mode

This guide includes the following information:

- “Introduction” on page 2
- “Installation” on page 3
- “Theory of Operation” on page 4
- “Specification” on page 5

Introduction

The MIL-225C is a 100Mbps Fast Ethernet and ATM (OC-3) device that converts multi-mode fiber optic signals to single-mode fiber optic signals and vice versa. The device has two SC connectors:

- SM port (single-mode fiber)
- MM port (multi-mode fiber)

The MIL-225C is capable of supporting both multi-mode fiber cable with a 2 Km signal driving distance and single-mode fiber cable with a 15 Km signal driving distance. The device can also be used in FDDI.

Packaging Contents

The MIL-225C package contains the following:

- MIL-225C multi-mode to single-mode fiber converter
- Power supply adapter
- Installation guide

Specification for Multi-Mode (MM) Port

- Connector type: SC
- Wavelength: 1261-1360 nm
- Cable specs.: 62.5/125 μ m
- Min. optical power output: -19.0 dBm
- Max. optical power output: -14.0 dBm
- Receive sensitivity: -30.0 dBm
- Max. optical power input: -14 dBm
- Supports up to 2 km of multi-mode cable

Dimensions: 4.0" x 3.5" x 1"

SC-type Connector

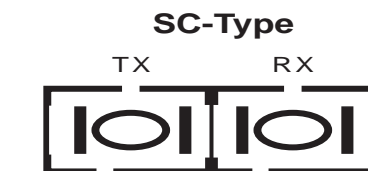


Figure 4. SC-type Connector

Storage Temperature

- Minimum: -25° C
- Maximum: 75° C

Operating Conditions

Table 1: Recommended operation conditions

Parameters	Minimum	Maximum
Operating Temperature	+5° C	40° C
Humidity: non-condensing	10%	95%
Signal Output Load	35 ohm	75 ohm
Supply Voltage	4.75 V	5.25 V

Specification for Single-Mode (SM) Port

- Connector type: SC
- Wavelength: 1261-1360 nm
- Cable specs.: 9/125 μ m
- Min. optical power output: -15.0 dBm
- Max. optical power output: -8.0 dBm
- Receive sensitivity: -31.0 dBm
- Max. optical power input: -8.0 dBm
- Supports up to 15 km of single-mode cable

Features

- Compact, painted metal enclosure
- Power supply adapter
- Diagnostic LEDs

Installation

To install the MIL-225C:

1. Connect an SC-type, single-mode cable to the SM port on the device.
2. Connect an SC-type, multi-mode cable to the MM port on the device.
3. Supply power to the MIL-225C using the power supply adapter included with the unit. Make sure the PWR LED illuminates.
4. Check the SMSD LED and the MMSD LED for proper status. This depends on the status of the devices connected to the unit.

Please contact MiLAN's technical support if you experience difficulties installing the MIL-225C.

Theory of Operation

The MIL-225C is a single-mode to multi-mode fiber converter for Fast Ethernet, ATM (OC-3), and FDDI networks. When the device receives an optical input signal from one port, it will convert it into an electrical signal. The device will then convert the electrical signal back to an optical signal suitable for transmission over the other port.

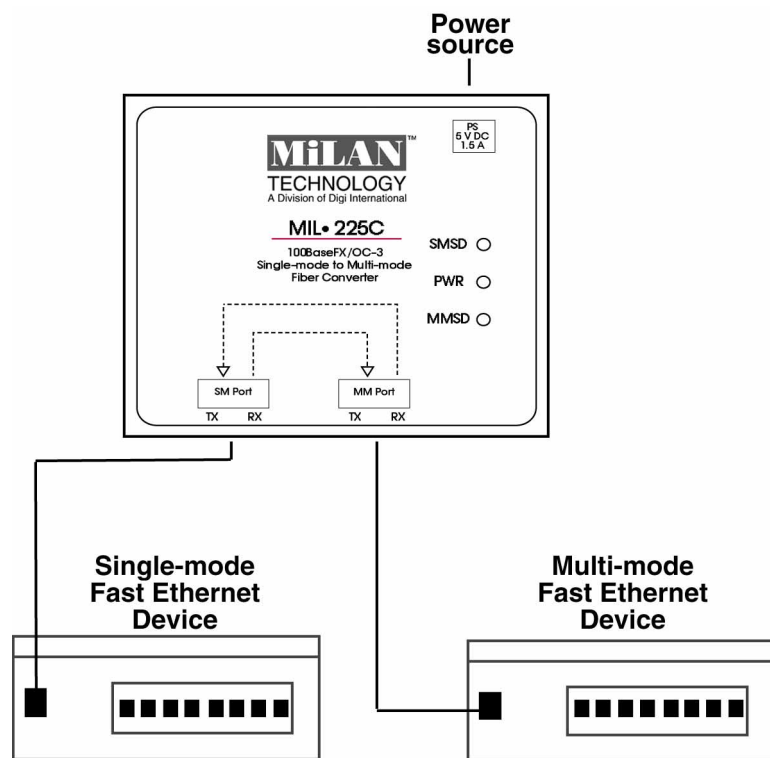


Figure 3. Theory of Operation

Indicators

There are 3 LED indicators on the MIL-225C:

- **SMSD:** *Single-mode Signal Detection.* This LED illuminates when MIL-225C receives a valid link or data traffic signal from the device connected to the SM port
- **PWR:** *Power.* This LED illuminates when the MIL-225C is powered up (using the power supply adapter)
- **MMSD:** *Multi-mode Signal Detection.* This LED illuminates when MIL-225C receives a valid link or data traffic signal from the device connected to the MM port

Specifications

Power Supply

External power is required for the MIL-225C. The system draws 700 mA at normal operation in room temperature of 25° C.

- A 110 V AC wall mount power supply adapter for domestic use
- A 220 V AC power supply with IEC receptacle converting to 5 V DC 1.5 Amp for international use (according to the country where the unit will operate in)