



DESCRIPTION

The IFS DE7200M Series Ethernet 2 port media converter is designed to transmit and receive 10/100 Mbps data over multimode or single-mode optical fiber. The IFS DE7200M Series will function as a 10 Mbps Ethernet link, or as a 100 Mbps Ethernet link without any adjustments. The DE7200M Series is environmentally hardened to operate in extreme temperatures. Status indicating LED's for power and data rate are present at the RJ-45 connector. At the fiber optic transceiver end, link and data LEDs provide operational status. Plug-and-play design ensures ease of installation requiring no optical adjustments. The modules are available in stand-alone only.

APPLICATION EXAMPLES

- 10/100 Mbps Ethernet
- High Speed Computer Links

FEATURES

- 10/100 Mbps Ethernet
 - 10/100 TX Electrical Port
 - 100 FX Optical Port
 - Full Duplex or Half Duplex Data
- Supports Auto MDI/MDI-X
- Distances up to 37 km (23 miles)
- Designed to Meet Full Compliance with the Environmental Requirements (Ambient Operating Temperature, Mechanical Shock, Vibration, Humidity with Condensation, High-Line/Low-Line Voltage Conditions and Transient Voltage Protection) of NEMA TS-1/TS-2 and the Caltrans Specification for Traffic Signal Control Equipment.
- Multimode and Singlemode Versions Available
- SC Optical Connectors Standard
- No In-field Optical Adjustments Required
- Power, Transmit and Receive Data Status LED Indicators
- IEEE 802.3 Compliant
- Comprehensive Lifetime Warranty



Available at: www.ifs.com

- A & E Specifications, (CSI)
- AutoCAD Drawings
- Operation Manuals
- Technical Bulletins

ORDERING INFORMATION

	PART NUMBER	DESCRIPTION	FIBERS REQUIRED	OPTICAL PWR BUDGET	MAX. DISTANCE*
MULTIMODE 62.5/125µm**	DE7210M	10/100 Mbps Ethernet (1310 nm)	2	10 dB	1.2 miles (2 km)
	DE7210M-WDMA	10/100 Mbps Ethernet (1310/1550 nm)	1	8 dB	
	DE7210M-WDMB	10/100 Mbps Ethernet (1550/1310 nm)	1	8 dB	
SINGLEMODE 9/125µm	DE7230M	10/100 Mbps Ethernet (1310 nm)	2	15 dB	23 miles (37 km)
ACCESSORIES♦	PS-12VDC 12 Volt DC Plug-in Power Supply (Included) PS-12VDC-230 12 Volt DC Plug-in Power Supply, 230 VAC Input (Included if specified at time of order)				
OPTIONS	Add '-C' for Conformally Coated Printed Circuit Boards (Extra charge, consult factory)				

* Optical transmission distance is limited to optical loss of the fiber and any additional loss introduced by connectors, splices and patch panels. Distance can also be limited by fiber bandwidth. **For 50/125 Fiber, subtract 4 dB from Optical Power Budget. ♦ All accessories are third party manufactured.

SPECIFICATIONS

DATA

Data Interface:	Ethernet
Data Rate:	10/100 Mbps TX 100 Mbps FX IEEE 802.3 Compliant Full Duplex or Half Duplex

WAVELENGTH

DE7210M	1310 nm, Multimode
DE7210MWDM	1310/1550 nm, Multimode
DE7230M	1310 nm, Singlemode

NUMBER OF FIBERS

1 or 2

CONNECTORS

Optical:	SC
Power:	Terminal Plug with screw clamps
Data:	RJ-45

ELECTRICAL & MECHANICAL

Power:	24 VAC @110 mA 12 VDC @200 mA
Voltage Regulation:	Solid-state; independent on each board
Current Protection:	Automatic Resettable Solid-State Current Limiters
Circuit Board:	Meets IPC Standard
Size (in./ cm.) (HxWxL):	
Surface Mount:	1.0 x 2.0 x 3.5 in., 2.5 x 5.1 x 8.9 cm.
Shipping Weight:	< 2 lbs./0.9 kg

ENVIRONMENTAL

MTBF:	>100,000 hours
Operating Temp:	-40° C to +74° C
Storage Temp:	-40° C to +85° C
Relative Humidity:	0% to 95% (non-condensing)†

† May be extended to condensation conditions by adding suffix '-C' to model number for conformal coating.

AGENCY COMPLIANCE

FCC PART 15 COMPLIANT



MADE IN THE USA

Complies with FDA Performance Standard for Laser Products, Title 21, Code of Federal Regulations, Subchapter J

OPTICAL POWER BUDGET

FIBER	WAVELENGTH	TRANSCIVER MODEL	OPTICAL PWR BUDGET	MAX. DISTANCE*
Multimode 62.5/125µm**	1310 nm 1310/1550 nm	DE7210M DE7210MWDM	10 dB 8 dB	1.2 miles (2 km)
Singlemode 9/125µm	1310 nm	DE7230M	15 dB	23 miles (37 km)

* Optical transmission distance is limited to optical loss of the fiber and any additional loss introduced by connectors, splices and patch panels. Distance can also be limited by fiber bandwidth. **For 50/125 Fiber, subtract 4 dB from Optical Power Budget.

SYSTEM DESIGN

