



### DESCRIPTION

The IFS DE7200 Series Ethernet 2 port transceiver is designed to transmit and receive 10/100 Mbps data over multimode, singlemode optical fiber, or electrical. The IFS DE7200 Series will function as a 10 Mbps Ethernet link, or as a 100 Mbps Ethernet link without any adjustments. The DE7200 Series is environmentally hardened to operate in extreme temperatures. Loss of optical link contact closure for remote alarm sensing. 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
- Distances up to 45 km (28 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
- Loss of Optical Link Contact Closure
- 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**	DE7200-M	10/100 Mbps Ethernet (1310 nm)	2	10 dB	1.2 miles (2 km)
	DE7200-MM		4		
MM/SM	DE7200-MS	10/100 Mbps Ethernet (1310 nm)	4	10 dB/15 dB	1.2 miles (2 km) MM 28 miles (45 km) SM
SINGLEMODE 9/125µm	DE7200-S	10/100 Mbps Ethernet (1310 nm)	2	15 dB	28 miles (45 km)
	DE7200-SS		4		
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.

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 With Offices in Asia Pacific ■ Australia ■ Europe ■ Latin America



## TECHNICAL SPECIFICATION

## DE7200 SERIES

## 10/100 Mbps ETHERNET 2 PORT TRANSCEIVER

### SPECIFICATIONS

#### DATA

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

#### WAVELENGTH

DE7200-MM, M, MS	1310 nm, Multimode
DE7200-SS, S, MS	1310 nm, Singlemode

#### NUMBER OF FIBERS

2, 4

#### CONNECTORS

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

### ELECTRICAL & MECHANICAL

Power:	
Surface Mount:	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.) (LxWxH):	
Surface Mount:	4.0 x 3.0 x 1.0 in., 10.2 x 7.6 x 2.5 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

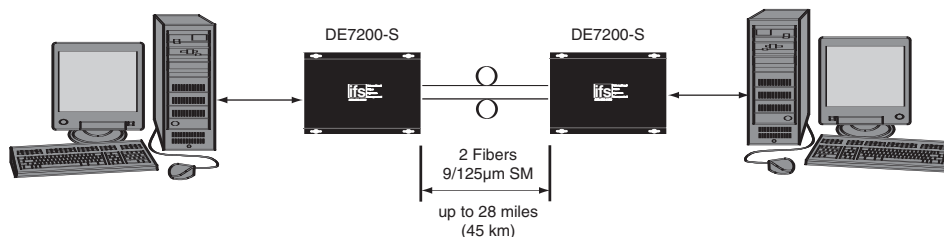
Complies with FDA Performance Standard for Laser Products,  
Title 21, Code of Federal Regulations, Subchapter J

### OPTICAL POWER BUDGET

FIBER	WAVELENGTH	TRANSCEIVER MODEL	OPTICAL PWR BUDGET	MAX. DISTANCE*
Multimode 62.5/125µm**	1310 nm	DE7200-MM DE7200-M	10 dB	1.2 miles (2 km)
MM/SM	1310 nm	DE7200-MS	10 dB/15 dB	1.2 miles (2 km) MM 28 miles (45 km) SM
Singlemode 9/125µm	1310 nm	DE7200-SS DE7200-S	15 dB	28 miles (45 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



International  
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Incorporated

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Due to our continued effort to advance technology, product specifications are subject to change without notice.