

DE7100 Series

IFS 10/100 Mbps Ethernet 3-Port Transceiver

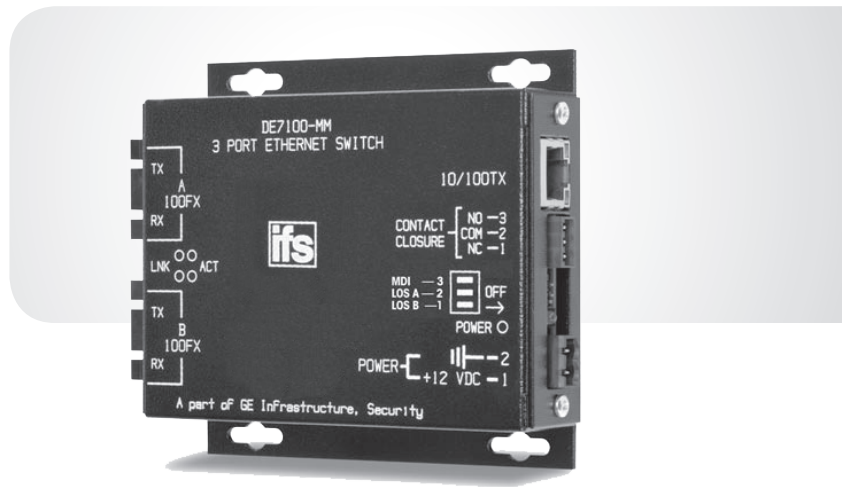
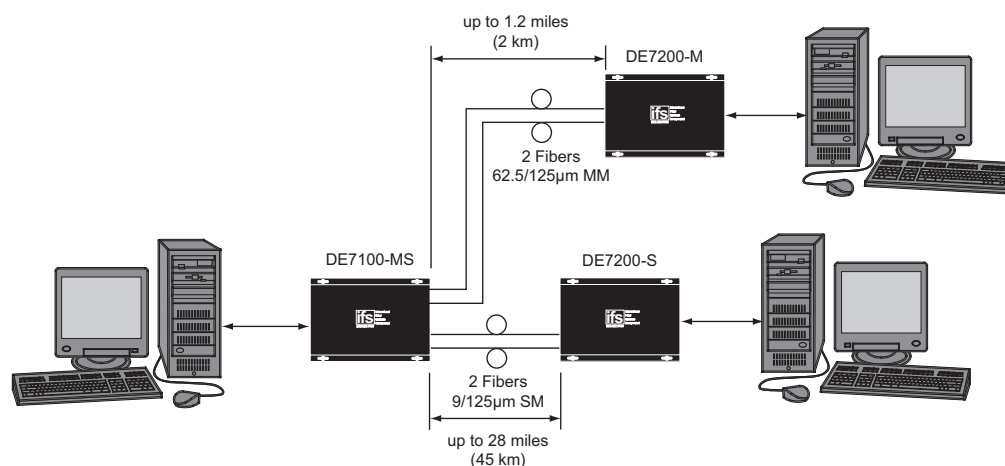
OVERVIEW

The IFS DE7100 Series Ethernet 3-port transceiver is designed to transmit and receive 10/100 Mbps data over multimode, single mode optical fiber, or electrical. The DE7100 provides one port 10/100TX and two ports of either 10/100TX or 100FX depending on the model ordered. The IFS DE7100 Series will function as a 10 Mbps Ethernet link, or as a 100 Mbps Ethernet link without any adjustments. The DE7100 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

SYSTEM DESIGN



STANDARD FEATURES

- 10/100 Mbps Ethernet
 - 10/100 TX Electrical Port
 - 100 FX Optical Port
 - Full Duplex or Half Duplex
- Distances up to 45 km (28miles)
- 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 Single Mode 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

DE7100 Series

North America
T 855-286-8889

Latin America
T 561-998-6114

IFS 10/100 Mbps Ethernet 3-Port Transceiver

Ordering Information

	Part Number	Description	Fibers Required	Optical Pwr. Budget	Max. Distance*
Electrical	DE7100-EE	10/100 Mbps Ethernet	N/A	N/A	328 Ft. (100 m)
Multimode 62.5/125µm**	DE7100-MM	10/100 Mbps Ethernet (1310 nm)	4	10 dB	1.2 miles (2 km)
MM/SM	DE7100-MS	10/100 Mbps Ethernet (1310 nm)	4	10 dB/15 dB	1.2 miles (2 km) MM 28 miles (45 km) SM
Single Mode 9/125µm	DE7100-SS	10/100 Mbps Ethernet (1310 nm)	4	15 dB	28 miles (45 km)
	DE7100-SE	10/100 Mbps Ethernet (1310 nm)	2	15 dB	28 miles (45 km)
Accessories ♦	PS12VDC1.5A-U	12VDC, 1.5A Plug-in Power supply (110/220VAC) with Universal power plug adapter kit (Included)			

*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, IEEE 802.3 Compliant
Operating Mode:	Full Duplex or Half Duplex

Wavelength

DE7100-MM, EM, MS	1310 nm, Multimode
DE7100-SS, ES, MS	1310 nm, Single Mode

Number Of Fibers

	2, 4
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Connectors

Power:	Terminal Block with Screw Clamps
Optical	SC
Data:	RJ-45

Electrical & Mechanical

Power:	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)

Agency Compliance

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



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Specifications subject to change without notice.

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