# GE Security

# 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

### 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 (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 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

# 10/100 Mbps Ethernet 3 Port Transceiver

Transmits and receives 10/100 Mbps data over multimode, single mode, optical fiber, or electrical.





# GE Security

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Latin America T 305-593-4301 F 305-593-4300

gesecurity.com/ifs

Specifications subject to change without notice

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### **Specifications**

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

Connectors

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

**Electrical & Mechanical** 

Power:

Surface Mount: 12 VDC @ 200 mA

Voltage Regulation: Current Protection: Solid-State; independent on each board

Automatic Resettable Solid-State Current Limiters

Circuit Board: Size (in./cm.) (LxWxH) Meets IPC Standard

Surface Mount:  $4.0 \times 3.0 \times 1.0$  in.,  $10.2 \times 7.6 \times 2.5$  cm

Shipping Weight: < 2 lbs./0.9 kg

Environmental

> 100,000 hours MTBF: -40° C to +74° C -40° C to +85° C Operating Temp: Storage Temp:

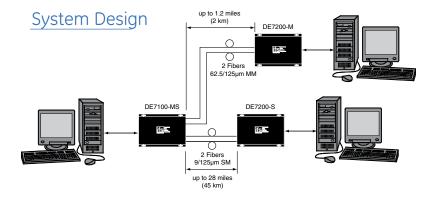
Relative Humidity: 0% to 95% (non-condensing)†

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



#### Made in the USA

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



## Ordering Information

	Part Number	Description	Fibers Required	Opt. Pwr. Budget	Max. Distance*
	T dit ivallibei	Description	Tibers Required	opt. 1 Wi. Budget	Tian. Distance
Electrical	DE7100-EE	10/100 Mbps Ethernet	N/A	N/A	328 ft. (100 m)
Multimode 62.5/125µm**	DE7100-MM DE7100-ME	10/100 Mbps Ethernet (1310 nm)	4 2	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 DE7100-SE	10/100 Mbps Ethernet (1310 nm)	4 2	15 dB	28 miles (45 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)				

<sup>\*</sup> 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.

