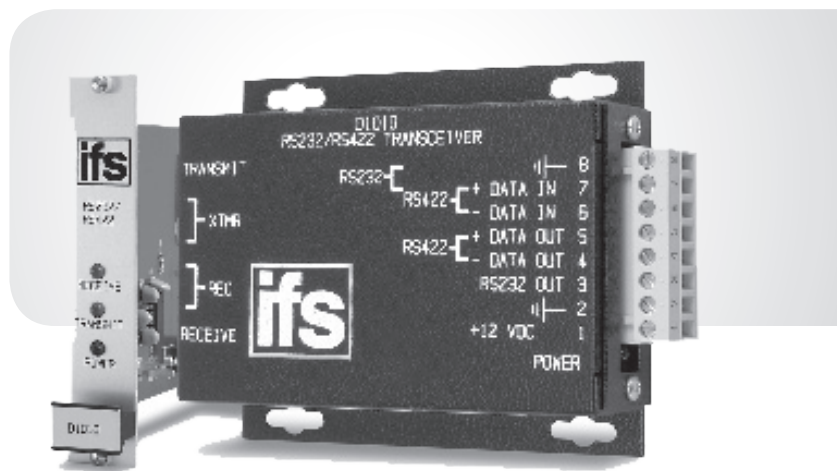


D1000 Series

IFS RS-232/422 Point-to-Point Data Transceivers



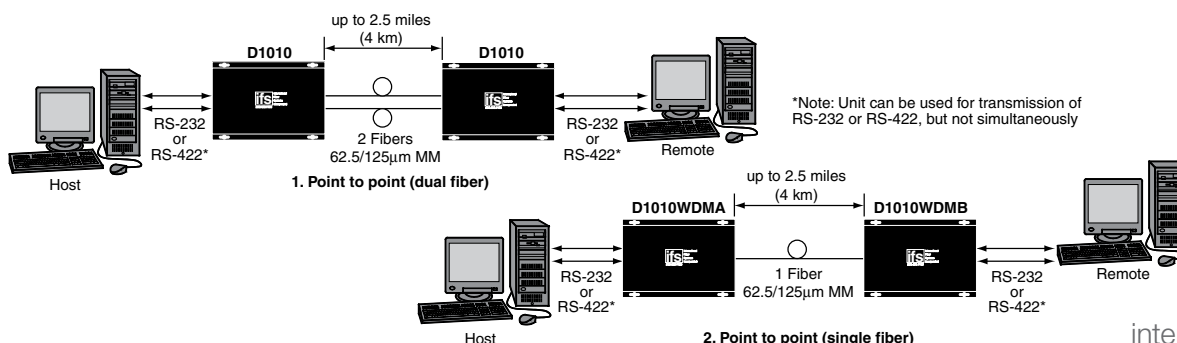
OVERVIEW

The IFS D1000 Series data transceivers provide point-to-point transmission of simplex or duplex EIA RS232/RS-422 data signals over one or two optical fibers. The transceivers are transparent to data encoding allowing for broad-range compatibility. The transceivers are also compatible with the IFS D2100 Series drop and repeat data transceivers when used as line terminating devices. Models within this series are available for use with multimode or single mode optical fiber. Plug-and-play design ensures ease of installation requiring no electrical or optical adjustments. Each transceiver incorporates power and transmit/receive data status indicating LED's for monitoring proper system operation. The modules are available in either stand-alone or rack mount versions.

APPLICATION EXAMPLES

- Access Control Systems
- Building Automation and Environmental Control Systems
- Computer/Data Equipment
- Fire & Alarm Systems
- Traffic Signal Control Equipment

SYSTEM DESIGN



STANDARD FEATURES

- Meets EIA RS-232/422 Specifications (Simplex or Duplex)
- Point-to-Point Topology
- Transparent to Data Encoding / Compatible with Major Data Protocols
- Data Rates up to 1.5 Mbps
- No In-field Electrical or Optical Adjustments Required
- Power, Transmit and Receive Data Status LED Indicators
- NTCIP Compatible
- Tested and Certified by an Independent Testing Laboratory for 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.
- Integrated WDM for Greater Product Reliability
- Automatic Resettable Solid-State Current Limiters
- Hot-Swappable Rack Modules
- Distances up to 37 Miles (60 km)
- Comprehensive Lifetime Warranty

D1000 Series

IFS RS-232/422 Point-to-Point Data Transceivers

North America
T 855-286-8889

Latin America
T 561-998-6114

Ordering Information

	Part Number	Description	Fibers Required	Optical Pwr. Budget	Max. Distance*
Multimode 62.5/125µm**	D1010	RS-232/RS-422 Data Transceiver (850 nm)	2	14 dB	2.5 miles (4 km)
	D1010WDMA ↔	RS-232/RS-422 Data Transceiver (850/1310 nm)	1	14 dB	2.5 miles (4 km)
	D1010WDMB	RS-232/RS-422 Data Transceiver (1310/850 nm)	1	14 dB	2.5 miles (4 km)
	D1020	RS-232/RS-422 Data Transceiver (1310 nm)	2	13 dB	8 miles (13km)
Single Mode 9/125µm	D1030	RS-232/RS-422 Data Transceiver (1310 nm)	2	20 dB	37 miles (60 km)
	D1030WDMA ↔	RS-232/RS-422 Data Transceiver (1310 nm)	1	20 dB	37 miles (60 km)
	D1030WDMB	RS-232/RS-422 Data Transceiver (1550 nm)	1		
Accessories ♦	PS12VDC1.5A-U	12VDC, 1.5A Plug-in Power supply (110/220VAC) with Universal power plug adapter kit (Included)			
Options	Add '-R3' to Model Number for R3 Rack Mount - No Charge (Requires R3 Rack purchased separately)				

*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. ↔ WDMA must mate with a WDMB

Specifications

Data

Data Interface:	RS-232 (data lines only), or RS-422 (see note)
Data Rate:	DC - 1.5 Mbps (NRZ)
Operating Mode:	Asynchronous Simplex or Full-Duplex
Bit Error Rate:	<1 in 10 ⁹

Wavelength

D1010:	850 nm, MM
D1010WDMA:	850/1310 nm, MM
D1010WDMB:	1310/850 nm, MM
D1020:	1310 nm, MM
D1030:	1310 nm, SM
D1030WDMA:	1310 nm, SM
D1030WDMB:	1550 nm, SM

Number Of Fibers

D1010: 2	D1010WDMA: 1	D1010WDMB: 1	D1020: 2
D1030: 2	D1030WDMB: 1	D1030 WDMB: 1	

Connectors

Optical	ST
Data and Power:	Terminal Block with Screw Clamps

Electrical & Mechanical

Power:	
Surface Mount:	12 VAC @ 150 mA
Rack:	From Rack
Number of Rack Slots:	1
Current Protection:	Automatic Resettable Solid-State Current Limiters
Circuit Board:	Meets IPC Standard
Size (in./cm.) (LxWxH)	
Surface Mount:	4.2 x 4.0 x 1.0 in., 10.7 x 8.9 x 2.5 cm
Rack Mount:	7.0 x 4.9 x 1.0 in., 17.8 x 12.5 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)

NOTE: The D1010 Series may be compatible with some RS-485 (4-wire) systems.

Agency Compliance

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



interlogix.com

Specifications subject to change without notice.

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D1000 Series