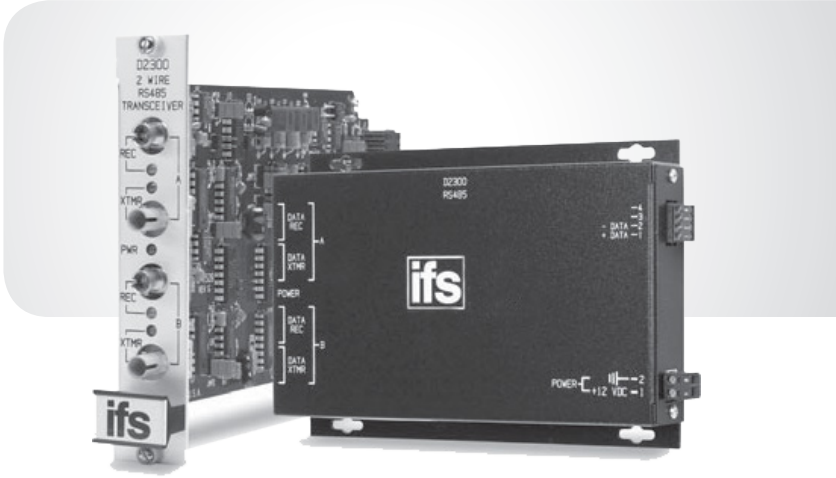
D2300 Series

IFS RS-485 (2-wire) Drop and Repeat Data Transceivers



OVERVIEW

The IFS D2300 Series data transceivers provide drop and repeat transmission of half-duplex (2-wire) EIARS-485 data signals over one or two optical fibers. The transceivers feature optical “drop & repeat” capability that allows the user to easily configure the network operation. The transceivers are transparent to data encoding allowing for broad-range compatibility. The D2300 Series transceivers can be used as line-terminating devices with these modules. 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.

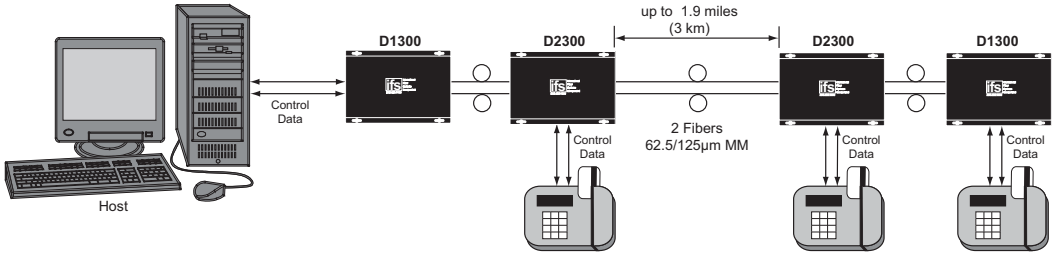
APPLICATION EXAMPLES

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

STANDARD FEATURES

- Meets EIA RS-485 Specifications
- 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.
- Automatic Resettable Solid-State Current Limiters
- Power, Transmit and Receive Data Status LED Indicators
- No In-field Electrical or Optical Adjustments Required
- Data rates up to 200 kbps NRZ
- Data Re-clocking
- Transparent to Data Encoding/Compatible with Major Data Protocols
- Drop and Repeat Network Architecture
- 2-Wire (Half-Duplex)
- True Tri-State Output
- Distances up to 20 Miles (33km)
- Comprehensive Lifetime Warranty

SYSTEM DESIGN



D2300 Series

IFS RS-485 (2-wire) Drop and Repeat 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**	D2300	RS-485, 2-Wire Repeater (850 nm)	2 In/2 Out	10 dB	1.9 miles (3 km)
	D2320	RS-485, 2-Wire Repeater (1310 nm)	2 In/2 Out	10 dB	6 miles (10 km)
Single Mode 9/125µm	D2325	RS-485, 2-Wire Repeater (1310 nm)	2 In/2 Out	23 dB	20 miles (33 km)
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.

Specifications

Data	
Data Interface:	RS-485 (2-wire)
Data Rate:	DC - 200 Kbps*
Total Network Pulse Distortion:	<1µs
Wavelength	
	D2300: 850 nm, Multimode
	All others: 1310 nm, Multimode or Single Mode
Number Of Fibers	
	2 In/2 Out
Connectors	
Date and Power:	Terminal Block with Screw Clamps
Optical:	ST
Electrical & Mechanical	
Power:	
Surface Mount:	12 VDC @ 250 mA to 24 VAC @ 125 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:	7.0 x 4.9 x 1.0 in., 17.8 x 12.5 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)

Agency Compliance

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

FCC PART 15 COMPLIANT CE cULus

interlogix
United Technologies

interlogix.com

Specifications subject to change without notice.