![comnet Communication Networks logo]

The ComNet™ FDXT1/E1 data transceivers are T1/E1 links that support AMI and B8ZS data signals over one single mode or multimode optical fiber. The transceivers synchronize and regenerate data to eliminate jitter accumulated through the link. 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 a bi-color (Red/Green) indicating LED for monitoring proper system operation. The FDXT1/E1 standard size units may be either wall or rack-mounted in a ComNet card cage, or may be installed in an IFS R3 rack with the selection of the corresponding model (see ordering information next page).

FEATURES

› Robust design assures extremely high reliability in unconditioned out-of-plant/roadside environments

› LED status indicators confirm operating status

› Designed for installation in harsh out-of-plant/ unconditioned industrial or roadside operating environments (-40° to +70°C ambient). Fully compliant with the environmental requirements of NEMA TS-1/TS-2 for Traffic Signal Control Equipment

› Remote Fault Indication allows the user to determine when a fiber break or loss of prime operating power has occurred, or a transceiver in the field has failed

› Voltage transient protection on all power and signal input/ output lines

› Wide optical dynamic range: optical attenuators are never required

› Hot-swappable rack modules

› Interchangeable between stand-alone or rack mount use – ComFit

› Fit and Functional Replacement for IFS D1200-R3 Series

› Single Fiber Design

› Lifetime Warranty

APPLICATIONS

› T1/DS-1 and E1 Telephony Networks

› ITS/Traffic Signal Control Equipment

› Building Automation and Environmental Control Systems

› Computer/Data Equipment

SPECIFICATIONS

Data

Data Format:	T1/E1 AMI or B8ZS DSL communications
Data Rate:	T1 - 1.544Mbps
	E1 - 2.048Mbps
Operating Mode:	Asynchronous, simplex or full-duplex
Bit Error Rate:	<10-12 @ Maximum Optical Loss Budget

Wavelength
1310nm, MM and SM

Number Of Fibers
1

Optical Emitter
Laser Diode

LED Indicators
Power Indicator
Receive Data Active
Transmit Data Active
Test

Connectors

Power:		Terminal Block
Optical:		ST (Standard, other connectors available by request)
Data:	R3:	Terminal Block
	ComFit:	RJ-45 for T1(break out kit included) BNC for E1

Electrical & Mechanical

Power:	R3:	24 VAC @ 2W
	ComFit:	9VDC @ 2W
Rack Power:	From Rack	
Number of Rack Slots:	1 (Order model for ComNet or IFS racks)	
Current Protection:	Automatic Resettable Solid-State Current Limiters	
Circuit Board:	Meets IPC Standard	
Size (L×W×H):	R3:	6.1 × 5.3 × 1.1 in (15.5 × 13.5 × 2.8 cm)
	ComFit:	6.1 × 5.3 × 1.1 in (15.5 × 13.5 × 2.8 cm)
Shipping Weight:	<2 lbs./0.9 kg	

Environmental

MTBF:	>100,000 hours
Operating Temp:	-40˚ C to +75˚ 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

FC PART 15 COMPLIANT　CE　cULus E322911　RoHS COMPLIANT　N24621

MADE IN THE USA

ORDERING INFORMATION

Part Number	Description	Fibers Required	Fiber	Optical Pwr Budget	Max Distance	# Rack Slots
FDXT1/E1M1A	Universal Point-to-Point "A" End, ComFit size	1	Multimode 62.5/125µm	16 dB	4 km (2.5 mi)	1
FDXT1/E1S1A	Universal Point-to-Point "A" End, ComFit size	1	Single mode 9/125µm	23 dB	69 km (43 mi)	1
FDXT1/E1M1B	Universal Point-to-Point "B" End, ComFit size	1	Multimode 62.5/125µm	16 dB	4 km (2.5 mi)	1
FDXT1/E1S1B	Universal Point-to-Point "B" End, ComFit size	1	Single mode 9/125µm	23 dB	69 km (43 mi)	1

Included Accessories Options	9 Volt DC Plug-in Power Supply, 90-264 VAC. 5060 Hz (Included with ComFit version only) Add '/R3' for IFS D1200 Series-Compatible Unit Add '/C' for Conformally Coated Circuit Boards (Extra charge, consult factory) DIN-Rail Mounting Adaptor Plate Kit - With Mounting Hardware (Optional, order model DINBKT1)

TYPICAL APPLICATION

D ←→ FDXE1/T1 A unit —○— FDXE1/T1 B unit ←→ D

—○— OPTICAL FIBER
—— TWISTED PAIR