Model OTDL-FOM-01 RS-232/422/485 Serial Fiber Optic Modem

Features / Benefits

Versatile Fiber Optic Modem supports RS-232, RS-422 and RS-485 data transmission via single-mode optical fiber.

Asynchronous point-to-point data rate of up to 115.2kb/s (RS-232) and 500kb/s (RS-422 & RS-485).

RS-422/485 port supports 32 nodes with options for up to 128 nodes.

1310nm wavelength single-mode transmission up to 20km on two fibers.

DC Power from +9 to +25 Volts.

Industrial temperature range from -25°C to +70°C.

Surge protection up to 1500W with 15kV static protection.

The OLSON TECHNOLOGY, INC. Model OTDL-FOM-01 RS-232/RS-422/RS-485 fiber optic modem is ideal to connect RTU to HOST or SCADA controllers via optical fiber. The equipment is resistant to the effects of lightning strikes, power surges, and other electromagnetic interference, providing a reliable data network. The Model OTDL-FOM-01 meets EIA/RS-232 transmission standards at data rates up to 115.2kb/s and RS-422 and RS-485 transmission standards at data rates up to 500kb/s. The transmission distance is up to 20km using dual single-mode fibers.

System Specifications

Data Specifications

Standards :	RS-232, RS-422, RS-485	
Optical Interface:	SC/UPC Connector Standard	
Data Interface:	8-bit Terminal Block	
Data Rate:	500kb/s max.	
Transmission Distances:		
	RS-232 Port (Copper)	15m
	RS-422/485 Port (Copper)	1500m
	SM Optical Fiber	20km
Indicator LED's:	Power	
	RxD (optical fiber interface receiving)	
	TxD (optical fiber interface transmitting)	

Pin Definitions

Power Interface	GND	Ground
	DCIN	9-25V Input
Optical Fiber Interface	IN	Optical Fiber Input
	OUT	Optical Fiber Output
RS-485/422 Port	T+/D+	RS-422 Send+ / RS-485+
	T-/D-	RS-422 Send- / RS-485-
	R+	RS-422 Receive+
	R-	RS-422 Receive-
	GND	Ground
RS-232 Port	IN	RS-232 Input
	OUT	RS-232 Output
	GND	Ground

Physical Characteristics

	Min	Typ	Max	Units
Operating Temperature	-25		+70	°C
Weight		8.1		oz.
		230		g
Dimensions (L x W x H)		3.94 x 2.72 x 0.86		in.
		100 x 691 x 22		mm

Powering

	Min	Typ	Max	Units
DC Input Voltage	+9	+12V	+25	V_{DC}
Current Draw @ +12V_{DC}		80		mA
Power Dissipation		1	2	W

20km SM Fiber

RS-232, 422 or 485 Interface

RS-232 Interface
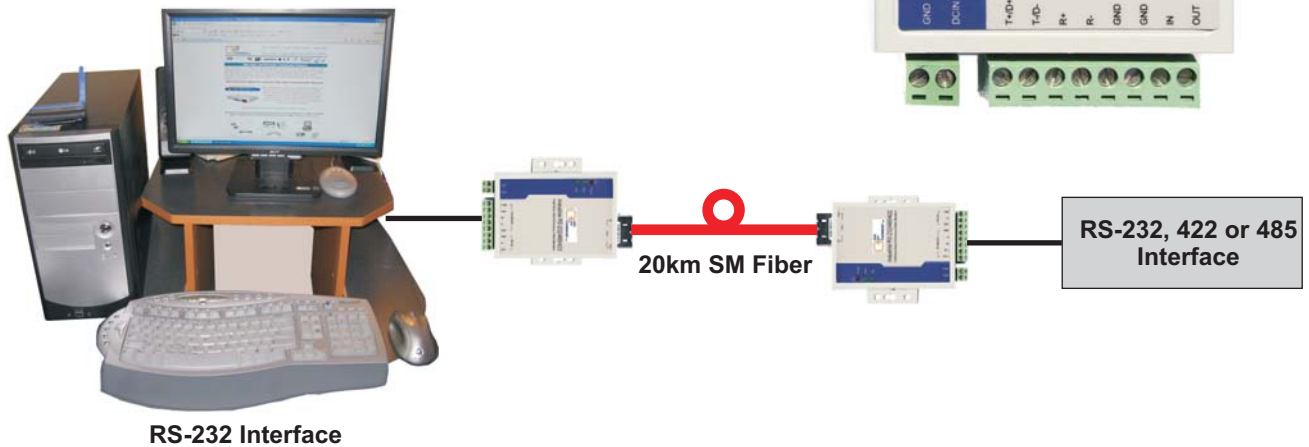
Ordering Information

Model OTDL-FOM-01-SM   RS-232/485/422 Fiber Optic Modem, 1310nm, Dual Fiber, SM

Model OTPS-12A-2B   Power Supply, +12 Volt, 1.5 Amp, Stripped and Tinned Leads