

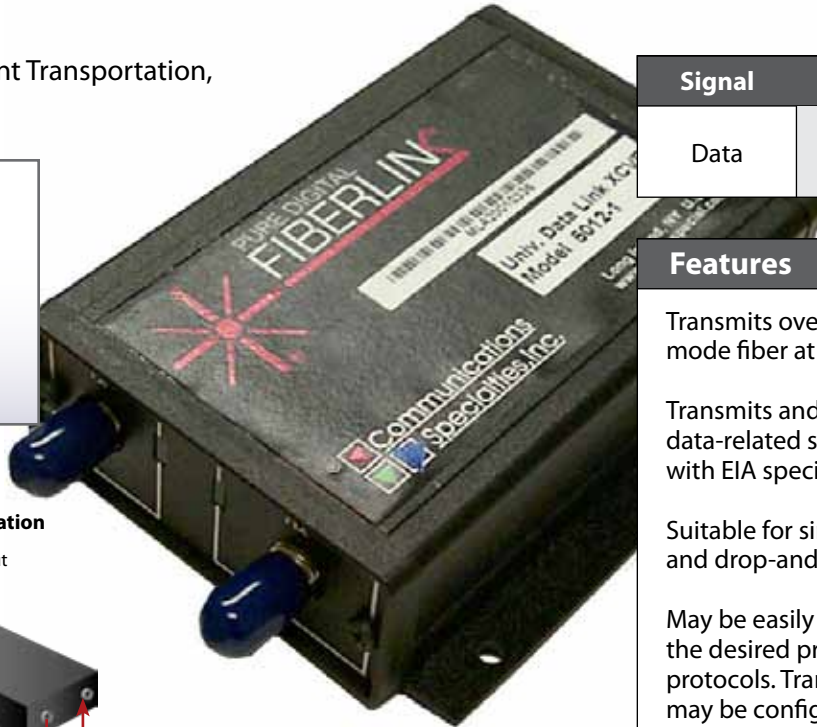
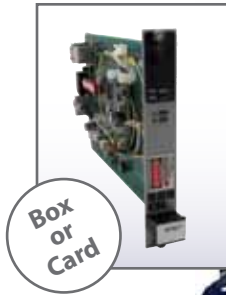


5012/5018A Universal Data Transceivers

RS-232/422/485 data transmitted digitally over single mode or multimode fiber

Ideal Applications:

Data Acquisition, Intelligent Transportation, Industrial, Manufacturing



Signal	Channels	Direction
Data	1	↔

Features

Transmits over multimode or single mode fiber at 850 or 1310 nm

Transmits and receives all standard data-related signals in accordance with EIA specifications

Suitable for simplex, full duplex and drop-and-repeat operation

May be easily user-configured for the desired protocol, including mixed protocols. Transmitter and receiver may be configured differently

Adjustment free; all digital processing and transmission

Wide operating data rate, with low-speed mode (DC up to 1.0 Mbps; 200 Kbps for RS-232) and high-speed mode (10 Kbps - 10 mbps)

Extended ambient operating range

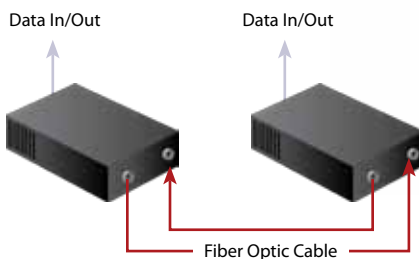
Data-derived or RTS transmit/receive switching (RS-485)

Indicator LEDs monitor signal and power

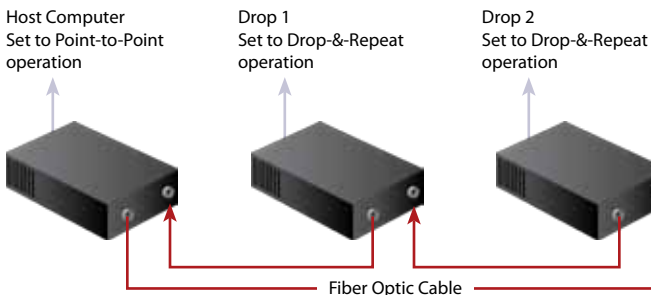
Card version fills one slot in 6000A card cage

RoHS Compliant

Point-to-Point Data Link Configuration



Ring or Loop Type Data Bus Configuration



Ordering Information

Part Number	Description	Fiber Cores
5012-1	Transceiver Box, 850 nm, MM fiber	2
5018A-1	Transceiver Card, 850 nm, MM fiber	2
5012-3	Transceiver Box, 1310 nm, MM fiber	2
5018A-3	Transceiver Card, 1310 nm, MM fiber	2
5012-7	Transceiver Box, 1310 nm, SM fiber	2
5018A-7	Transceiver Card, 1310 nm, SM fiber	2
PDPS-1-pp	Power Supply	

Power Supply Suffix Codes (pp) for AC Line Cord:

NA - North America AU - Australia EU - Europe
 JP - Japan UK - United Kingdom

Sales

631-273-0404 | commspecial.com
info@commspecial.com

Data Specifications

Low-Speed Transmission Rate	RS-232, DC-200 Kbps; RS-422/485, DC to 1.0 Mbps
High-Speed Transmission Rate	RS-422/485, 10 Kbps to 10 Mbps
Operating Modes	Simplex, duplex, asynchronous, drop-and-repeat, RTS or data derived T/R control (RS-485)
Compatibility	RS-232, RS-422, RS-485 (2 or 4-wire)
Input Signal Voltage	± 5 to ± 30 volts per EIA RS-232D 4.5 to 5 volts per RS-422, RS-485
Output Signal Voltage	± 5 to ± 10 volts per EIA RS-232D 4.5 to 5 volts per RS-422, RS-485

General Specifications

Number of Fibers	2
Operating Wavelength	850 or 1310 nm
Connectors	Optical: ST: multimode; FC: singlemode Data: Removable screw-clamp type terminal block
Operating Power (per unit)	10 to 18 volts DC @ 150 ma peak (connected via separate power connector)
Operating Temperature Range	-35 to +74° C
Indicator LEDs	Power, Transmit, Receive, Loss of Data Alarm on card version
Physical Size	3.5 W x 1.25 H x 4.75 L (inches) 89 W x 32 H x 121 L (mm)
Weight	approx. 1 lb.; 0.45 kg
Slots filled in 6000A Card Cage	1
MTBF:	84,000 Hours

Note: The Universal Data Transceiver is ESD protected to +/-kV on all signal inputs and outputs



5012/5018 Universal Data Transceivers



Schedule
Contract GS-03F-5063C



Operating Loss Budget & Maximum Usable Distance*

Wavelength	Loss (dB)	Distance (km)
<i>Low Speed Operation</i>		
850 MM	0-12 dB	0-4
1310 MM	0-14 dB	0-14
1310 SM	0-15 dB	0-35
<i>High Speed Operation</i>		
850 MM	0-6 dB	0-2
1310 MM	0-8 dB	0-8
1310 SM	0-8 dB	0-20

SM = Single Mode Fiber

MM = MultiMode Fiber

* Distance specifications are only approximate and are not guaranteed. Operating loss budget must not be exceeded.

About CSI

Communications Specialties, Inc. (CSI) is an award-winning manufacturer of Pro A/V products for the distribution, conversion or transmission of television and computer video signals, including fiber optic transmission systems, scan converters and video scalars. The company was founded in 1983 by veterans of the broadcast industry. Since then, CSI has managed to consistently design innovative products that are used worldwide by Fortune 500 Companies in a variety of markets such as Broadcast/Professional A/V, Video Conferencing, Education, Home Theater, Security, ITS, Industrial Monitoring, and more!

Also from CSI: Scan Do® Scan Converters and Deuce® Video Scalars