

Technical Specifications

Serial I/O	EIA/ETA RS232C / RS422 / RS485 (selectable) - RJ45 Connector Baud rate - Auto sense and auto adjust from 300 to 460K Serial setting dip switch provides settings for: • Select RS232 / RS422/485 modes • Select serial termination (for end of line) • RX/TX crossover to flip the RX and TX if needed • Set RS422/485 data direction to automatic or manual if needed LED status indicators (Serial TX activity + Serial RX activity) ESD protection for up to 26kV
GPI I/O	2x general purpose inputs (GPI) on RJ45 connector Passive contact closure (short-to-trigger), up to 25 Hz, 3.75 kV isolation 2x general purpose outputs (GPO) on RJ45 connector Relay contact closure, up to 25 Hz, 30 V DC/VAC, 0.25A, 3.75 kV isolation LED status for GPI1/2 and GPO1/2 activity
Power	+12V DC @ 2W nominal - (supports 7 - 15V DC input range) 1x Power LED on side of module
Physical	Size: 140mm x 42mm x 22mm (5.51" x 1.65" x 0.86") incl. connectors Weight: 125g (4.4oz)
Includes	Module, AC power supply, SFP depending on model

Ordering Information

Model	Mode	Type	TX Wavelength	SFP Included
ODT 1510	Single	Single	1310nm	Yes
ODT 1510 MM	Multi	Short Range	850nm	Yes
ODT 1510 CW	Single	Coarse	1270 - 1610nm	No



WARNING
CLASS 1M LASER PRODUCT
LASER RADIATION

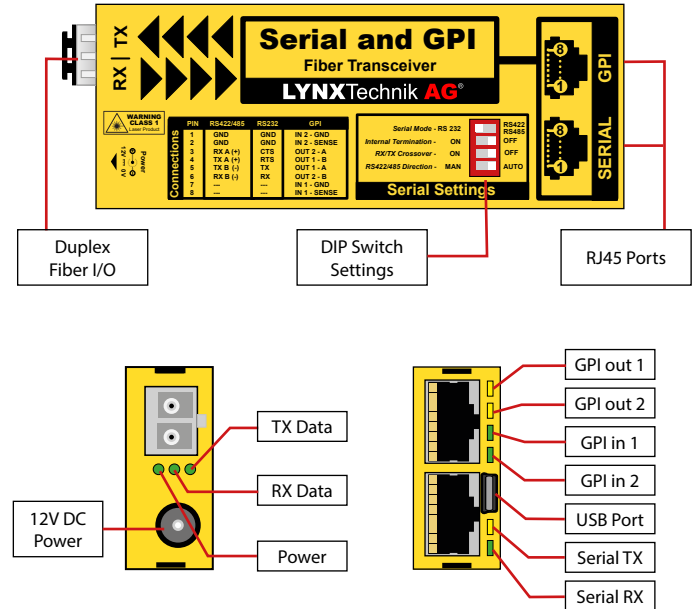
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ODT 1510

Serial RS232/422/485 & GPI to Fiber Transceiver



The ODT 1510 yellobrik extends a serial data communication and two GPI signals over fiber. It supports RS232, RS422, and RS485 protocols at 300–460K Baud with auto-sensing and auto-adjustment, including mixed serial standards. It is compatible with standard 1310nm single-mode, 850nm multi-mode, and CWDM SFPs.

Connections

The ODT 1510 yellobriks are designed to be used in pairs. The units support RS-232, RS-422, and RS-485 serial communication in both full-duplex and half-duplex modes. In addition, two GPI and two GPO signals are provided.

Duplex Fiber connections use LC connectors and require two fiber links. To protect the optical interface from dust and contamination, keep the supplied dust plug installed whenever the fiber connection is not in use.

A USB port is provided for firmware updates, configuration, and monitoring. Firmware updates are provided free of charge via yelloGUI and Lynx Centraal.

Settings

Serial Mode:	Chose between RS232 and RS 422/485
Internal Termination:	Set to ON if last device in line
Crossover:	Select to swap TX and RX lines
Direction:	Data direction mode. Not applicable for RS 232. Must be set to Auto for Half Duplex. GND connection is required for AUTO mode.

Module LEDs

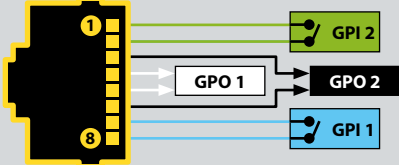
Power LED	
	Device Running
	“Locate Module” function active
	Hardware Issues
	Device Not Powered
TX LED	
	Output Signal Active
	No Input Signal Detected, No Signal Transmitted (Laser Active)
RX LED	
	Valid Signal Received
	Incompatible Input Signal
	No Signal Detected

Distances

ODT 1510	Single-mode 1310nm: up to 10km (12 miles)
ODT 1510 MM	Multi-mode: up to 550m (1800 feet)
ODT 1510 CW	Single-mode Coarse Wavelengths: up to 40/80km (25/50 miles)

GPI Connections

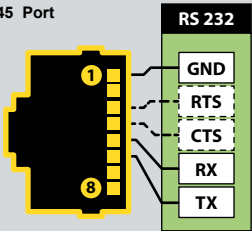
- GPI RJ45 Port**
- 1 IN 2 - GND
 - 2 IN 2 - SENSE
 - 3 OUT 2 - A
 - 4 OUT 1 - B
 - 5 OUT 1 - A
 - 6 OUT 2 - B
 - 7 IN 1 - GND
 - 8 IN 1 - SENSE



RS 232 Connections

Serial RJ45 Port

- 1 GND
- 2
- 3 CTS
- 4 RTS
- 5 TX
- 6 RX
- 7
- 8

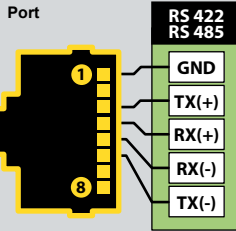


Serial Mode - Set to RS 232
Internal Termination - Not Applicable
RX/TX Crossover - Set to ON to flip RX/TX
RS 422/485 Direction - Not Applicable

RS 422/485 Full Duplex

Serial RJ45 Port

- 1 GND
- 2
- 3 RX A (+)
- 4 TX A (+)
- 5 TX B (-)
- 6 RX B (-)
- 7
- 8

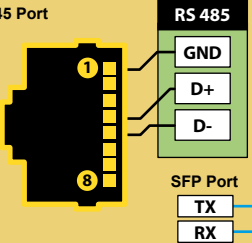


Serial Mode - Set to RS 422/485
Internal Termination - Set to ON if last in line
RX/TX Crossover - Set to ON to flip RX/TX
RS 422/485 Direction - Set to AUTO or MAN

RS 485 Half Duplex

Serial RJ45 Port

- 1 GND
- 2
- 3
- 4 TX A (+)
- 5 TX B (-)
- 6
- 7
- 8



ODT 1510 - A

Serial Mode - Set to RS 422/485
Internal Termination - Set to ON if last in line
RX/TX Crossover - Not Applicable
RS 422/485 Direction - Set to AUTO

ODT 1510 - B