yellobrik®

OBD 1514-E

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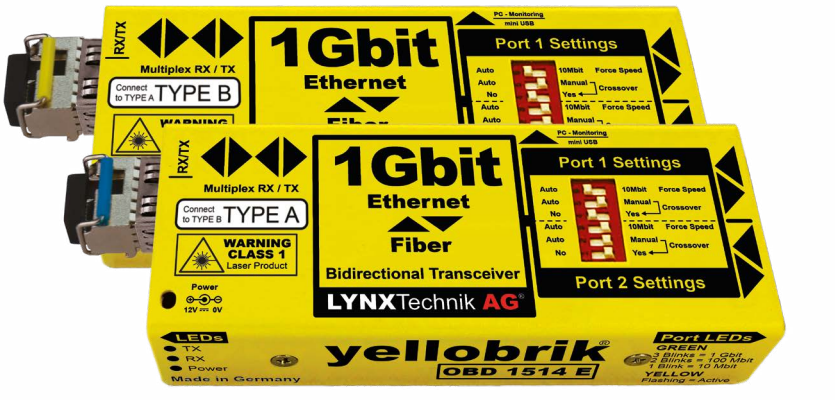
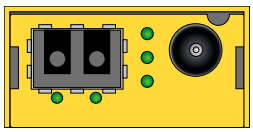
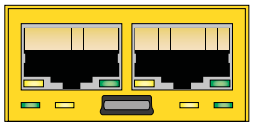
Bidirectional Ethernet to Fiber Transceiver (switch)







Features

- Bidirectional send and receive over single fiber link
- Supports standard ethernet inputs up to 1 Gbit/s
- Closed loop WDM fiber system
- 3 port ethernet switch (1 fiber, 2 electrical)
- Auto (10/100/1000) port speed detection
- Manually force 10Mbit/s electrical speed (if needed)
- Fiber transceiver speed always 1 Gbit/s
- Auto or manual electrical crossover selection
- Distances up to 10km(6.2 miles)* over singlemode fiber

Description

The OBD 1514 E is a matched pair of compact ethernet switches designed to extend the reach of electrical ethernet signals over long distances. The two switches are linked via single bidirectional fiber link which operates at a constant 1Gbit/s speed.

This pair of modules uses WDM (Wavelength-devision Multiplexing) fiber technology in a closed loop arrangement and essentially functions as an Ethernet extender solution. The fiber link supports distances up to 10km* and provides a single, high speed 1Gbit/s error-free optical connection between the two locations.

Each OBD 1514 E module has two standard RJ45 electrical Ethernet ports and the complete system functions as a 4 port ethernet switch, providing two standard RJ45 ethernet ports at each location bridged with fiber. For legacy systems, each electrical ethernet port can be set for automatic speed detection (10/100/1000) or forced to 10Mbit/s. Each port uses auto crossover detection or can be forced manually if needed. These functions are available using the dip switch.

Note: This system used WDM optical multiplexing and should only be used in point to point applications. This solution cannot be integrated into a CWDM multiplexed system.

Technical Specifications

Ethernet	2 x Ethernet ports, RJ 45 Connectors. 10 BaseTUTP category 3,4 or 5 cable up to 328ft/100m (2 pairs) 100 BaseTXUTP category 5 cable up to 328ft/100m (2 pairs) 1000 BaseTXUTP category 5 cable up to 328ft/100m (4 pairs)
	Auto detect bit rate (10/100/1000), or force to 10Mbit for each port (selectable)
	Automatic crossover detection or force manually for each port (selectable)
	Port speed / activity LED indication (next to Ethernet port)
Fiber Optic	**1 x fiber optic input/output per module** Simplex (Single mode) using LC/PC Connections
	Type A: OH-BD-51-1310-LC
	Type B: OH-BD-51-1550-LC
	IEEE 802.3z (1000BASE-X Gbit/s Ethernet over Fiber at 1 Gbit/s (125 MB/s)
	TX and RX active LEDs on side of module
	Max. distance approx. 10km* (6.2 miles - Singlemode)
Power	+12V DC @ 1.7W nominal without SFP (supports 7 - 22V DC input range)
Physical	Size: 120mm x 42mm x 22mm (4.73" x 1.65" x 0.86") including connectors Weight: 125g (4.4oz)
Ambient	5 - 40ºC (41 - 104ºF) 90% Humidity (non condensing)
Model #	OBD 1514-E (EAN# 4250479329416)
Includes	2x Modules, 2x SFPs 2xAC power supply

*Distance is an approximation. Actual distances achieved can be longer or shorter depending on the type of cable. Determine link losses and perform optical budget calculations to ensure correct operation.

Optional Accessories

Rack Frames

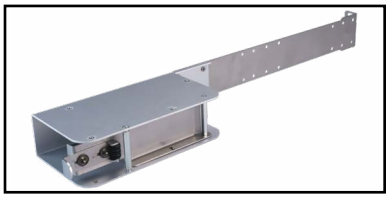
This yellobrik can be placed in a rack frame along others to build increasingly complex systems, all monitored and controlled with a rack controller (RCT 1012) and server module (SRV 1000) via a PC or MAC using LynxCentraal.

The RFR 1200 offers additional power redundancy with GPI alert. It automatically closes a connection between the A and B terminals on power failure.

The RPS A100 is a 100W power supply, which can be mounted at the rear end of the RFR 1200 with an RXT 1001 power supply holder for rack frames.

RFR 1200: yellobrik Rack Frame

RPS A100: 100W Power supply



RXT 1001: Power Supply Holder

Power Adapter Options

The power requirements of this yellobrik allow for the usage of P-Tap or XLR connection based power sources.

Note: This does not replace the included power supply.

P-TAP 1000
Use with a standard battery P-TAP power source.

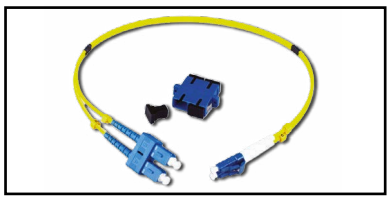
XLR 1000
Use with a standard 4 pin XLR camera battery power source.

Fiber Adapter Cables

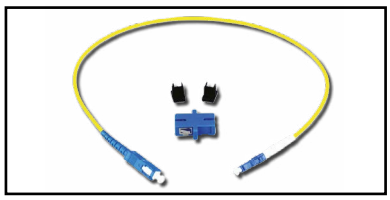
While some of our products offer LC, ST and SC fiber connectors, most SFPs in our product range offer LC fiber connectors.

To still allow the necessary flexibility in a professional setting we offer patch cables to convert LC to ST or SC fiber connections. These patch cables' insertion less and return loss are manually checked for each individual cable to allow for maximum precision when calculating the optical budget

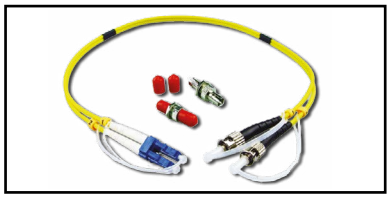
Besides the selection here we offer LC/FC and LC/LC patch cables.



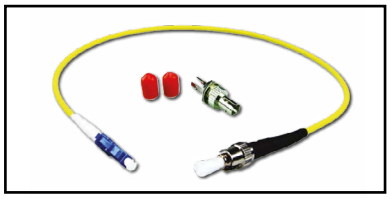
LC/SC Dup: LC/SC Duplex adapter cable



LC/SC Sim: LC/SC Simplex adapter cable



LC/ST Dup: LC/ST Duplex adapter cable



LC/ST Sim: LC/ST Simplex adapter cable