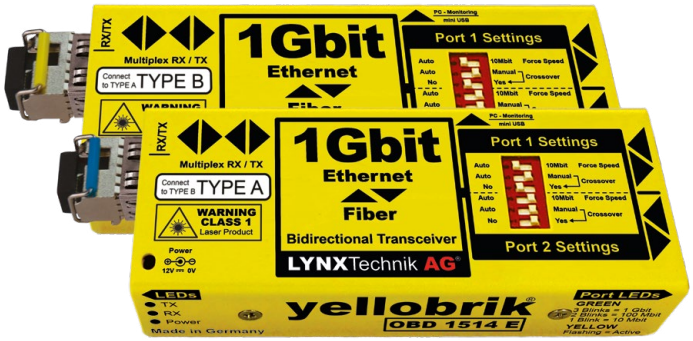
yellobrik®

OBD 1514-E

Bidirectional Ethernet to Fiber Transceiver (switch)

- 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



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 uses WDM and should only be used in point to point applications. **WDM cannot be integrated into a CWDM 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 in-/output per module** Full Duplex (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 - 22VDC 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

Power Adapter Options

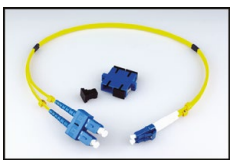
The kit includes an AC power supplies. The power adapters below are optional.

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

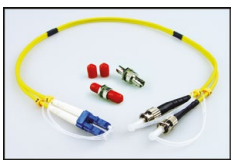
XLR 1000
Use with a standard 4 pin XLR camera battery power source.

Fiber Adapter Options

These adapter kits allow the use of ST or SC fiber connections on the module. SMF 0.5m (19.6") tail introduces less than 0.25dB attenuation.



Model# **LC/SC DUP**
LC/PC to SC/PC Adapter



Model# **LC/ST DUP**
LC/PC to ST/SC Adapter

*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.