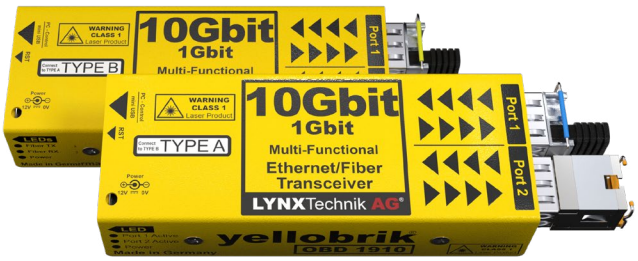
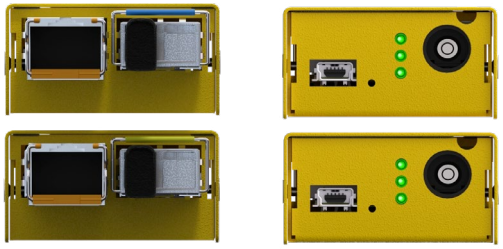
yellobrik®

OBD 1910

10GbE to Fiber Transceiver





Features

- 10GbE or 1GbE pass-through
- Extend 10Gbit/s Ethernet up to 30km* (18.6 miles) over a single bidirectional fiber link
- Maximum throughput of 20Gbit/s (full-duplex)
- Includes two modules, two power supplies, and four SFPs
- Simple plug-and-play operation
- Hot swapping and hot plugging

Description

The OBD 1910 kit is a simple, plug-and-play solution for extending 1 Gbit/s or 10 Gbit/s Ethernet connections up to 30 km* over a single fiber. Unlike conventional solutions that require two fibers (TX and RX), the OBD 1910 uses Wavelength Division Multiplexing (WDM) to transmit bidirectionally over a single single-mode fiber.

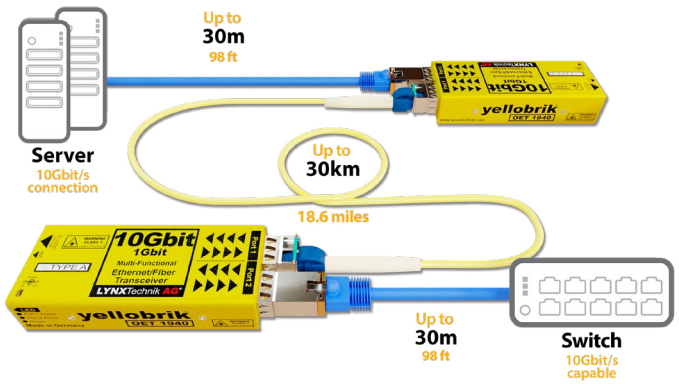
Simply connect the Ethernet and fiber links. No configuration required. It supports 1G and 10G Ethernet with up to 20 Gbit/s full-duplex throughput.

For existing multi-mode networks, the OBD 1910 MM kit extends connectivity over long distances by converting dual multi-mode TX/RX links into a single bidirectional connection over single-mode fiber.

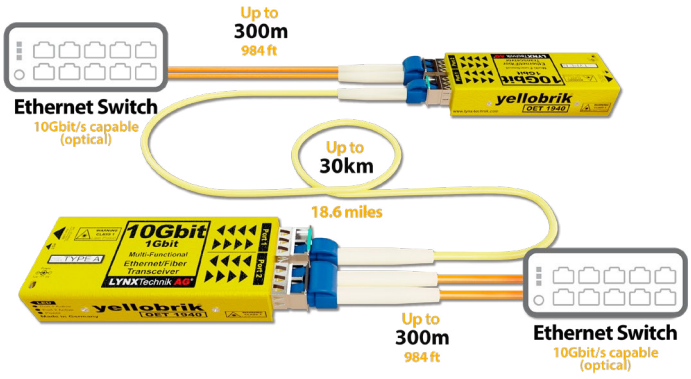
Technical Specifications

SFP Slots		2x 10 Gigabit SFP+ slots (Port 1 & 2)
		Supports 10GBase-T SFP, 10GBase-X, 1000Base-T
		IEEE 802.3ae
Port 1	10GbE Optical Simplex (Bidirectional) Transceiver SFP	Bidirectional WDM 1270nm and 1330nm
		Simplex LC connector
		TX Optical Power: 0 to 5dBm, RX Sensitivity: -15dBm
		Max. distance up to 30km (~18.5miles)
Port 2	OBD 1910 E	10 GbE, RJ45 10 GbE SFP for Cat6a/Cat7 cable
	OBD 1910 MM	10 GbE, Duplex Multi-mode Fiber SFP
LED		3 x LED (1x Power LED) (2x Signal present LED)
Power		+12V DC @ 4W with SFPs (supports 7 - 15V DC input range)
Physical (per module)		Size: 120mm x 42mm x 22mm (4.73" x 1.65" x 0.86") including connectors Weight: 125g (4.4oz)
Ambient		5 - 40°C (41 - 104°F) 90% humidity (non condensing)
Includes		2x Modules, 2x Power Supplies, 4x SFPs

OBD 1910 E (Ethernet Extender)



OBD 1910 MM (Multi-mode Extender)



Ordering Information

Model	Mode	Type	Tx Wavelength	Tx Power	Rx Input Range	Rx Sensitivity	Distance (up to)	SFP Included
OBD 1910 E	Ethernet	RJ45	N/A	N/A	N/A	N/A	30m	Yes
OET 1910 MM	Multi-mode	SR	850nm	-3dBm	840 - 860nm	-11dBm	300 m, 1000 ft	Yes

Optional Accessories

Rack Frames

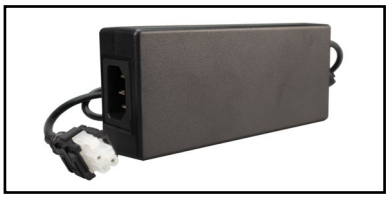
This yellobrik can be placed in a rack frame along others to build increasingly complex systems, all monitored and controlled with a rack controller (RCT 1012) and server module (SRV 1000) via a PC or MAC using LynxCentraal.

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

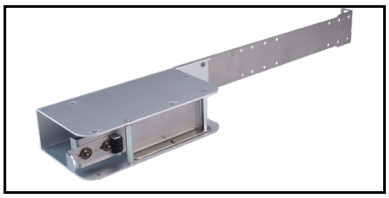
The RPS A100 is a 100W power supply, which can be mounted at the rear end of the RFR 1200 with an RXT 1001 power supply holder for rack frames.



RFR 1200: yellobrik Rack Frame



RPS A100: 100W Power supply



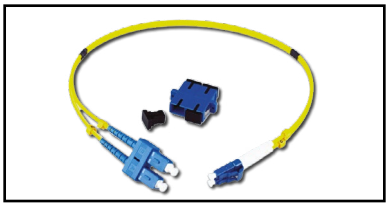
RXT 1001: Power Supply Holder

Fiber Adapter Cables

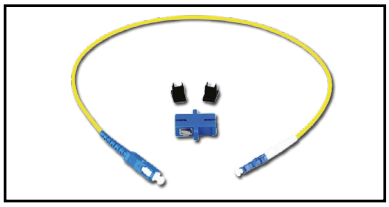
While some of our products offer LC, ST and SC fiber connectors, most SFPs in our product range offer LC fiber connectors.

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

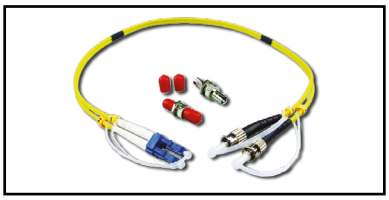
Besides the selection here we offer LC/FC and LC/LC patch cables.



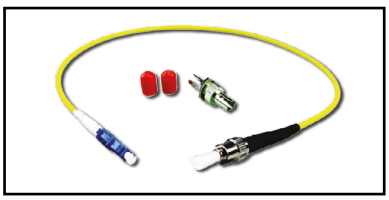
LC/SC Dup: LC/SC Duplex adapter cable



LC/SC Sim: LC/SC Simplex adapter cable



LC/ST Dup: LC/ST Duplex adapter cable



LC/ST Sim: LC/ST Simplex adapter cable

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.