yellobrik®

OBD 1910 E
OBD 1910 MM

10Gbit/s Ethernet to Fiber bidirectional Transceiver

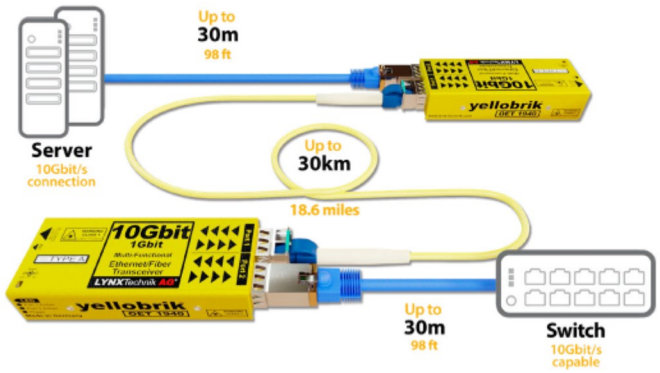
- Supports standard Ethernet/Optical signals at 10Gbit/s or 1Gbit/s
- Extend 10Gbit/s Ethernet up to 30km* (18.6 miles) over a single bidirectional fiber link
- Maximum throughput of 20Gbit/s (full-duplex)
- Includes two modules, two power supplies, and four SFPs
- Power and signal present LED indication
- Simple plug-and-play operation
- Supports hot swapping and hot plugging

The OBD 1910 kit is a simple, easy-to-use, plug-and-play solution to extend a 1Gbit/s or 10Gbit/s electrical ethernet network up to 30km* over a single fiber link. Usually, 2 fiber links are needed between locations (TX and RX) but the OBD 1910 uses WDM multiplexing to use a single bidirectional fiber link (singlemode fiber)

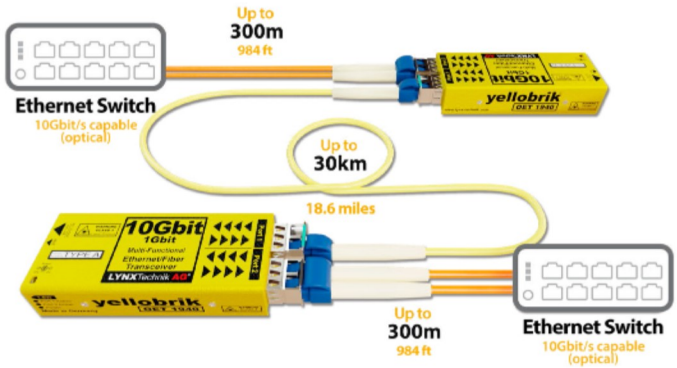
The kit includes two modules and two power supplies and four SFPs, just make the network connections and connect the fiber and you are all set. No complex configuration or setups are needed. The modules will support 1G and 10G Ethernet networks with a maximum throughput of 20Gbit/s (full duplex)

If your current network infrastructure is using multimode fiber in each location, then you are limited on connectivity distance. If you need to extend this multimode network over a long distance to another location, then we have the OBD 1910 MM version of the kit, which will convert the dual multimode RX and TX connections into a single bidirectional link using singlemode fiber.

Application Example: **OBD 1910 E**



Application Example: **OBD 1910 MM**



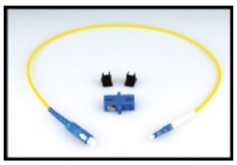
Technical Specifications

SFP Slots		2 x 10 Gigabit SFP+ slots (Port 1 & 2)
		Supports 10GBase-T SFP, 10GBase-X, 1000Base-T
		IEEE 802.3ae
Port 1	10Gbit/s Base Optical Bidirectional Transceiver SFP	1270nm and 1330nm wavelength - bidirectional (WDM)
		Simplex LC connector
		TX Optical Power: max. 0 to 5dBm / RX Sensitivity: -15dBm
		Max. distance up to 30km (~18.6ml)*
Port 2	10Gbit/s Base Electrical I/O SFP (OBD 1910 E)	10 Gigabit Ethernet
		RJ-45 connector via Cat6a/Cat7 cable
		Max. distance up to 30m (~98.4ft)*
	10Gbit/s Base Optical Multimode Transceiver SFP (OBD 1910 MM)	850nm wavelength - multimode
		Duplex LC connector
		TX Optical Power: -6 to -1dBm / RX Sensitivity: -11dBm
		Max. distance up to 300m (~984 ft)* - 50/125µ OM3
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)
Model #		OBD 1910 E (EAN# 4250479328334) OBD 1910 MM (EAN# 4250479328341)
Includes		2x Modules, 2x Power Supplies, 4x SFPs

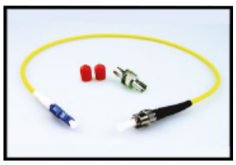
**Distance is an approximation. Actual distances achieved can be longer or shorter depending on the type of cable. Specially, when it comes to fiber cables and accumulated optical losses in the fiber link. Determine link losses and perform optical budget calculations to ensure correct operation.*

Fiber Adapter Options

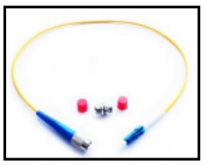
These adapter kits allow the use of ST or SC fiber connections on the module. SMF 0.5m (19.6") tail introduces less than 0.25dB attenuation.



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



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



Model# **LC/FC SIM**
LC/PC to FC/PC Adapter

OBD1910-rev02 Specifications subject to change