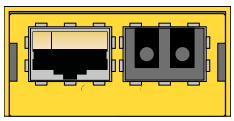
yellobrik®

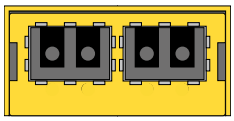
OET 1940
OET 1940 MC

10GbE to Fiber Transceiver (CWDM)

OET 1940
OET 1940 MC



OET 1940



OET 1940 MC

Features

- Supports standard Ethernet/Optical signals of 10GbE or 1GbE
- Solutions provided for:
  - » Electrical to CWDM fiber conversion
  - » Multimode to CWDM Fiber conversion
- 2x 10GbE transceiver ports (Electrical/Optical)
- Maximum throughput of 20Gbit/s (full duplex)
- Supports distances up to 25km (15.5 miles) over singlemode fiber*
- Power and signal present LED indication
- Supports hot swapping and hot plugging

Description

The OET 1940 are a range of variants to convert CWDM and MM fiber optic ethernet signals and extend the reach of 1Gbit/s or 10Gbit/s electrical ethernet signals over long distances.
The following variations are available:

OET 1940 (Copper ◄► CWDM)
This basic variant is an electrical RJ-45 to CWDM multiplexed fiber optic converter. The module includes a 10Gbit/s RJ45 electrical SFP.
The CWDM SFP has to be purchased separately. Please refer to the table below to find a suitable model.

OET 1940 MC (Multimode ◄► CWDM)
The optical multimode to optical CWDM converter. The module includes a multimode SFP.
The CWDM SFP has to be purchased separately. Please refer to the table below to find a suitable model.

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 CWDM Transceiver SFP (OET 1940) (OET 1940 MC)	1270 to 1610nm wavelength
		Duplex LC connector
		TX Optical Power: max. 0 to 4dB /RX Sensitivity: -23 dBm
		Max. distance up to 25km (~15.5ml)*
Port 2	10Gbit/s Base Electrical I/O SFP (OET 1940)	10 Gigabit Ethernet via Cat6a/Cat7 cable
		RJ-45 connector
		Max. distance up to 30m (~98.4ft)*
	10Gbit/s Base Optical Multimode Transceiver SFP (OET 1940 MC)	850nm wavelength - multimode
		Duplex LC connector
		TX Optical Power: -6 to -1dBm / RX Sensitivity: -11dBm
		Max. distance up to 300m (~984.2 ft)* - 50/125µ OM3
LED		3 x LED (1x Power LED) (2x Signal present LED)
Power		+12V DC @ 4.6W with SFPs (supports 7 - 15V 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 #		OET 1940 (EAN# 4250479327825) OET 1940 MC (EAN# 4250479328396)
Includes		Module, Power Supply, OH-TR-10G-XXXX-LC, OH-TR-10G-RJ45 (**only OET 1940**), OH-TR-10G-LC-MM (**only OET 1940 MM**)

*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.

CWDM SFP Options

The module will not be delivered with a default CWDM SFP. When ordering, please add the EAN/UPC of the corresponding SPF wavelength to your order.

For more information on "TX Power" and "RX Sensitivity" please refer to the Datasheet of the corresponding SFP (similar name, but wavelength in the name is changed to "XXXX").

The wavelength listed is TX wavelength.

EAN / UPC	Model	Wavelength
4250479328938	OH-TR-10G-1270-LC	1270 nm
4250479328945	OH-TR-10G-1290-LC	1290 nm
4250479328952	OH-TR-10G-1310-LC	1310 nm
4250479328969	OH-TR-10G-1330-LC	1330 nm
4250479328976	OH-TR-10G-1350-LC	1350 nm
4250479328983	OH-TR-10G-1370-LC	1370 nm
4250479328990	OH-TR-10G-1390-LC	1390 nm
4250479329003	OH-TR-10G-1410-LC	1410 nm
4250479329010	OH-TR-10G-1430-LC	1430 nm

EAN / UPC	Model	Wavelength
4250479329027	OH-TR-10G-1450-LC	1450 nm
4250479328242	OH-TR-10G-1470-LC	1470 nm
4250479328259	OH-TR-10G-1490-LC	1490 nm
4250479328266	OH-TR-10G-1510-LC	1510 nm
4250479328273	OH-TR-10G-1530-LC	1530 nm
4250479328280	OH-TR-10G-1550-LC	1550 nm
4250479328297	OH-TR-10G-1570-LC	1570 nm
4250479328303	OH-TR-10G-1590-LC	1590 nm
4250479328310	OH-TR-10G-1610-LC	1610 nm

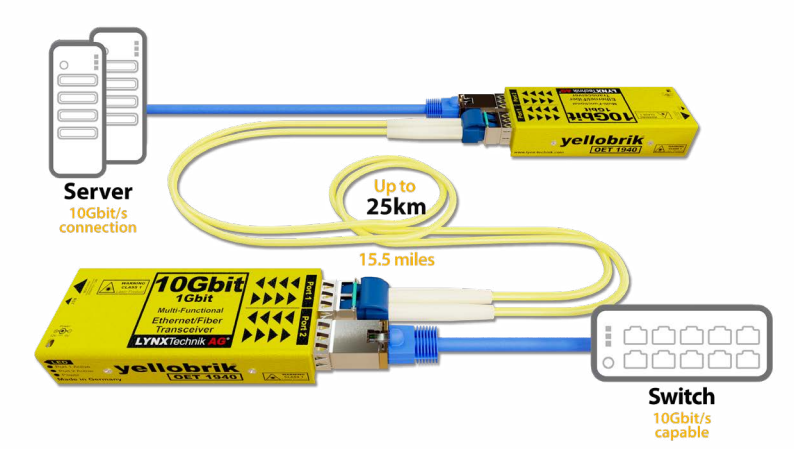
yellobrik®

OET 1940
OET 1940 MC

Application Example

The OET 1940 fiber converter are designed to be a drop in fiber converter with options for optical multiplexing of signals.

For this reason the Port 2 SFP can either be a regular RJ-45 connector or a Multimode Fieber connector, depending on the needs of the Switch, Router, Server, or end device.



Optional Accessories

Rack Frames

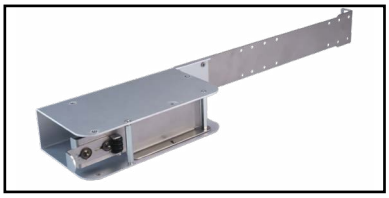
This yellobrik can be placed in a rack frame along others to build increasingly complex systems, all monitored and controlled with a rack controller (RCT 1012) and server module (SRV 1000) via a PC or MAC using LynxCentraal.

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



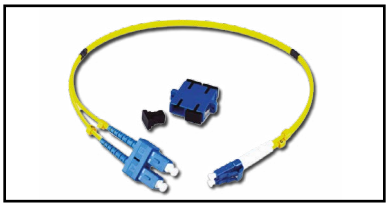
RXT 1001: Power Supply Holder

Fiber Adapter Cables

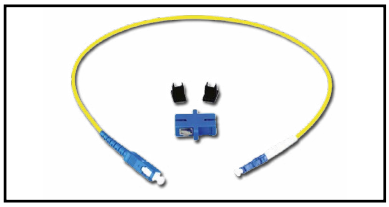
While some of our products offer LC, ST and SC fiber connectors, most SFPs in our product range offer LC fiber connectors.

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

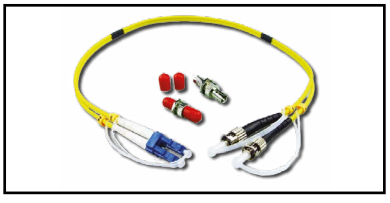
Besides the selection here we offer LC/FC and LC/LC patch cables.



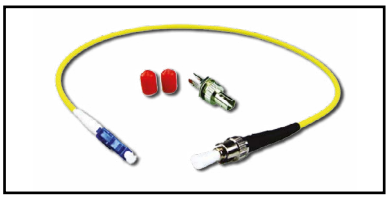
LC/SC Dup: LC/SC Duplex adapter cable



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.