

## 10Gbit/s Ethernet to Fiber Transceiver

- Supports standard Ethernet/Optical signals of 10Gbit/s or 1Gbit/s
- Solutions provided for:
  - > Electrical to CWDM fiber conversion
  - > Multimode Fiber to singlemode Fiber conversion
  - > Multimode to CWDM Fiber conversion
- 2x 10Gbit/s 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

The OET 1940 is a compact Ethernet to Fiber Optic converter designed to extend the reach of 1Gbit/s or 10Gbit/s electrical ethernet signals over long distances. The following versions are available:

### OET 1940 (CWDM)

This version is an electrical to fiber optic converter designed for CWDM multiplexed fiber systems. The module has a single 10Gbit/s RJ45 electrical connection included, and an optional CWDM SFP has to be specified for the required wavelength. (this is a required option). Note: Two fiber links are required, one for TX and one for RX (LC Connections)

### OET 1940 MS

This version is an optical to optical converter designed for situations where a conversion between multimode fiber and singlemode fiber is required. The module includes the multimode and singlemode SFPs, and each has two fiber connections, one for TX and one for RX (LC connections)

### OET 1940 MC

This version is an optical to optical converter designed for situations where conversion from multimode fiber into a singlemode CWDM fiber is required. The module includes the multimode SFP and an optional CWDM SFP has to be specified for the required wavelength. (this is a required option). Note: Two fiber links are required, one for TX and one for RX (LC Connections)

### CWDM Wavelength Options

(select one when ordering OET 1940 or OET 1940 MC)

| Wavelength | Option #          | EAN           |
|------------|-------------------|---------------|
| 1470nm     | OH-TR-10G-1470-LC | 4250479328242 |
| 1490nm     | OH-TR-10G-1490-LC | 4250479328259 |
| 1510nm     | OH-TR-10G-1510-LC | 4250479328266 |
| 1530nm     | OH-TR-10G-1530-LC | 4250479328273 |
| 1550nm     | OH-TR-10G-1550-LC | 4250479328280 |
| 1570nm     | OH-TR-10G-1570-LC | 4250479328297 |
| 1590nm     | OH-TR-10G-1590-LC | 4250479328303 |
| 1610nm     | OH-TR-10G-1610-LC | 4250479328310 |

### Application Example: OET 1940



\*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.

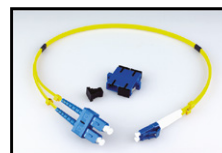


## Technical Specifications

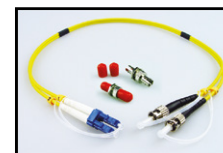
|                  |  |
|------------------|--|
| <b>SFP Slots</b> | 2 x 10 Gigabit SFP+ slots (Port 1 & 2)   |
|                  | Supports 10GBase-T SFP, 10GBase-X, 1000Base-T  |
|                  | IEEE 802.3ae   |
| <b>Port 1</b>    | <b>10Gbit/s Base Optical Long Reach+ Transceiver SFP</b>   |
|                  | 1310nm wavelength - singlemode   |
|                  | Duplex LC connector<br>TX Optical Power: -3 to +1dBm / RX Sensitivity: -14.4dBm<br>Max. distance up to 20km (~12.4 ml)*              |
| <b>Port 2</b>    | <b>10Gbit/s Base Optical CWDM Transceiver SFP</b>  |
|                  | 1470/1490/1510/1530/1550/1570/1590/1610nm wavelength   |
|                  | Duplex LC connector<br>TX Optical Power: max. 0 to 4dB / RX Sensitivity: -23 dBm<br>Max. distance up to 25km (~15.5ml)*              |
| <b>Port 2</b>    | <b>10Gbit/s Base Optical Multimode Transceiver SFP</b>   |
|                  | 850nm wavelength - multimode   |
|                  | Duplex LC connector<br>TX Optical Power: -6 to -1dBm / RX Sensitivity: -11dBm<br>Max. distance up to 300m (~984.2 ft)* - 50/125µ OM3 |
| <b>Port 2</b>    | <b>10Gbit/s Base Electrical I/O SFP</b>  |
|                  | 10 Gigabit Ethernet via Cat6a/Cat7 cable<br>RJ-45 connector<br>Max. distance up to 30m (~98.4ft)*                                    |
| <b>LED</b>       | 3 x LED<br>(1x Power LED)<br>(2x Signal present LED)   |
| <b>Power</b>     | +12V DC @ 4.6W with SFPs<br>( supports 7 - 15V DC input range )  |
| <b>Physical</b>  | Size: 120mm x 42mm x 22mm (4.73" x 1.65" x 0.86") including connectors<br>Weight: 125g (4.4oz)                                       |
| <b>Ambient</b>   | 5 - 40°C (41 - 104°F) 90% humidity (non condensing)  |
| <b>Model #</b>   | OET 1940 (EAN# 4250479328372)<br>OET 1940 MS (EAN# 4250479328389)<br>OET 1940 MC (EAN# 4250479328396)                                |
| <b>Includes</b>  | Module, Power Supply, Quick Reference Guide  |

### 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



Model# LC/FC DUP  
LC/PC to FC/PC Adapter

