



# Finisar® Transceivers, Transponders, and Active Optical Cables

# Finisar® Transceivers, Transponders, and Active Optical Cables

**SFP** (copper and optical; longwave, shortwave and WDM)

**DATACOM** applications using Fast Ethernet, Gigabit Ethernet, 1x/2x/4x Fibre Channel

**TELECOM** applications using OC-3/STM-1, OC-12/STM-4, OC-48/STM-16, EPON/GPON and Wireless/CPRI across all reaches

## FEATURES

- 3.3 V operating voltage
- Distances from very short links up to 100+ km
- Wide operating temperature range
- Metal enclosure for lower EMI
- Digital diagnostics
- Wireless CPRI compliant



## SFP+/SFP28/SFP56

(optical; longwave, shortwave, DWDM and tunable)

**DATACOM** applications using 10G, 25G, and 50G Ethernet and 2x/4x/8x/10x/16x/32x Fibre Channel (LW and SW)

**TELECOM** applications using either OC-192/STM-64, 10G Ethernet, or Wireless/CPRI

## FEATURES

- 3.3 V operating voltage
- Supports bit rates up to 53.1 Gb/s (LW, SW), 28.05 Gb/s (DWDM) and 25.78Gb/s (Tunable)
- Distances from short links up to 80 km LW, SW, DWDM (tunable and fixed)
- Wide operating temperature range
- Digital diagnostics
- Wireless CPRI compliant (LW and SW)
- Bi-directional SFP+ transceiver available



## CFP/CFP2/CFP4

(optical; longwave and shortwave)

**DATACOM** applications using 100G Ethernet

**TELECOM** applications using OTU4

## FEATURES

- Hot-pluggable, MSA-compliant CFP, CFP2, and CFP4 form factors
- Supports 103.1 Gb/s to 112 Gb/s aggregate bit rates
- Maximum link length of 100 m on OM3 MMF, 150 m on OM4 MMF, 10 km on SMF
- 3.3 V operating voltage



## QSFP+/QSFP28/QSFP56

(optical; longwave and shortwave)

**DATACOM** applications using 40G, 100G, and 200G Ethernet and high-density 10G, 25G, and 50G Ethernet

**TELECOM** applications using OTU3 and OTU4

## FEATURES

- Four-channel full duplex transceiver module
- Single-channel full duplex transceiver module (QSFP28 only)
- Hot-pluggable, MSA-compliant QSFP+, QSFP28 and QSFP56 form factors
- Maximum link length of 300 m on OM3 MMF, 400 m on OM4/OM5 MMF, and 40 km on SMF (QSFP+ only)
- 3.3 V operating voltage
- Digital diagnostics
- Wireless CPRI compliant (LW and SW)
- I-Temp variants available



## QSFP-DD/OSFP

(optical; longwave and shortwave)

**DATACOM** applications using 400G Ethernet and high-density 50G and 100G Ethernet

## FEATURES

- Four- or eight-channel full duplex transceiver module
- Hot-pluggable, MSA-compliant form factor
- Maximum link length of 70 m on OM3 MMF, 100 m on OM4 MMF and 10 km on SMF
- 3.3 V operating voltage
- Digital diagnostics



## CXP

(optical; shortwave)

**DATACOM** applications for high-bandwidth, chassis interconnections

## FEATURES

- Twelve-channel full-duplex transceiver module
- Hot Pluggable CXP form factor
- Maximum link length of 300 m on OM3 MMF and 400 m on OM4 MMF
- Multi-rate Capability: Supports 1 Gb/s to 16 Gb/s per channel



## Optical Engines (optical; shortwave)

**DATACOM** applications for inter-chassis connections

### FEATURES

- Twelve-channel full-duplex transceiver modules
- Maximum link length of 100 m at 10 Gb/s on OM3 MMF and 70 m at 25 Gb/s on OM4 MMF
- Multirate capability: supports 1 Gb/s up to 28.1 Gb/s per channel



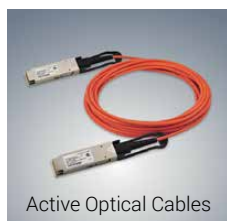
## Active Optical Cables

### SFPwire®

10 Gb/s and 25 Gb/s SFP+ Active Optical Cable for Ethernet; available with Connectivity Diagnostics® visual fault alert

### quadwire®

40 Gb/s to 400 Gb/s Parallel Active Optical Cable for 40, 100, and 400 Gigabit Ethernet and InfiniBand™ QDR, FDR, EDR, HDR, and NDR; 40G available with Connectivity Diagnostics® visual fault alert



### C.wire®

150 Gb/s Parallel Active Optical Cable for 100GbE and InfiniBand 12xQDR

## Coherent Transceivers (optical; longwave)

**TELECOM** 100 Gb/s, 200 Gb/s, and 400Gb/s applications

### FEATURES

- Digital Coherent Optics (with built-in Digital Signal Processor) and Analog Coherent Optics (paired with external DSP) modules
- Enables “pay-as-you-grow” deployment of coherent optics
- Supports multiple modulation formats, with aggregate data rates up to > 400 Gb/s



## Digital Diagnostics

Our Finisar® transceivers feature a microprocessor and diagnostics interface that provide performance information on the data link. Users can remotely monitor—in real-time—received optical power, transmitted optical power, laser bias current, transceiver input voltage and transceiver temperature of any transceiver in the network. These patented digital diagnostic functions provide network managers with a highly accurate, cost-effective tool for implementing reliable performance monitoring.

## XFP (optical; longwave, shortwave, DWDM, and tunable)

**DATACOM** applications using 10G Ethernet and 10x Fibre Channel

**TELECOM** applications using OC-192/STM-64

### FEATURES

- Supports bit rates up to 11.3 Gb/s
- Distances up to 200 km (LW, SW, and DWDM) and 80 km (Tunable)
- Digital diagnostics
- Wide operating temperature range versions available



## Endurance Compact Transceivers (optical; longwave and shortwave)

### FEATURES

- Compact form-factor for high-density solutions
- Data rate flexibility including 1G and 10G Ethernet, Fast Ethernet, and 1x/2x/4x/8x/16x Fibre Channel
- Board-mounted for an edge optical interface or internal mounting
- Designed for rugged applications



## SFF (optical; longwave and shortwave)

**DATACOM** applications using Gigabit Ethernet, 1x/2x/4x Fibre Channel

**TELECOM** applications using OC-3/STM-1, and OC-48/STM-16 across all reaches

### FEATURES

- Distances from very short links up to 15 km
- Wide operating temperature range
- Available in 2x5, 2x7 or 2x10. 2x7 and 2x10 incorporate digital diagnostics



## About II-VI

II-VI Incorporated, a global leader in engineered materials and optoelectronic components, is a vertically integrated manufacturing company that develops innovative products for diversified applications in communications, industrial, aerospace & defense, semiconductor capital equipment, life sciences, consumer electronics, and automotive markets. Headquartered in Saxonburg, Pennsylvania, the Company has research and development, manufacturing, sales, service, and distribution facilities worldwide. The Company produces a wide variety of application-specific photonic and electronic materials and components, and deploys them in various forms, including integrated with advanced software to support our customers. For more information, please visit us at [www.ii-vi.com](http://www.ii-vi.com).

The logo for II-VI, consisting of the letters 'II-VI' in a bold, white, serif font. The logo is centered on a dark red background that features a subtle geometric pattern of overlapping hexagons and triangles, creating a crystalline or molecular structure effect.

