

Product Guide

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

SFP+ (optical; longwave, shortwave, DWDM and tunable)

DATACOM applications using 10G and 25G Ethernet and 2x/4x/8x/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 28.05 Gb/s (LW, SW, and DWDM) and 11.3 Gb/s (Tunable)
- Distances from short links up to 80 km metro (LW, SW, and DWDM) and 80km (Tunable)
- Wide operating temperature range
- Digital diagnostics
- Wireless CPRI compliant (LW and SW)
- Bi-directional SFP+ transceiver available



SFP+

CFP/CFP2/CFP4 (optical; longwave and shortwave)

DATACOM applications using 40G and 100G Ethernet

TELECOM applications using OTU3 and OTU4

Features

- Hot-pluggable, MSA-compliant CFP, CFP2 and CFP4 form factors
- Supports 39.8 Gb/s to 112 Gb/s aggregate bit rates
- Maximum link length of 100m on OM3 MMF, 150m on OM4 MMF, 10km on SMF, and 500km in Amplified DWDM Applications
- 3.3 V operating voltage



CFP/CFP2/CFP4

QSFP+/QSFP28 (optical; longwave and shortwave)

DATACOM applications using 40G and 100G Ethernet, 128G Fibre Channel and high-density 10G and 25G Ethernet

TELECOM applications using OTU3 and OTU4

Features

- Four-channel full-duplex transceiver module
- Hot-pluggable, MSA-compliant QSFP+ and QSFP28 form factors
- Maximum link length of 300m on OM3 MMF, 400m on OM4 MMF, and 10 km on SMF
- 3.3 V operating voltage



QSFP+/QSFP28

CXP (optical; shortwave)

DATACOM applications using 100G Ethernet and chassis interconnections

Features

- Twelve-channel full-duplex transceiver module
- Hot Pluggable CXP form factor
- Maximum link length of 100m on OM3 MMF and 150m on OM4 MMF
- Multirate capability: supports 1.06 Gb/s to 12.5 Gb/s per channel



CXP

Active Optical Cables

SFPwire 10 Gb/s SFP+ Active Optical Cable for 10G Ethernet

quadwire 40 Gb/s to 100 Gb/s Parallel Active Optical Cable for 40GbE, InfiniBand 4xQDR, Infiniband 4xFDR, and Infiniband 4xEDR

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



Active Optical Cables

Optical Engines (optical; shortwave)

DATACOM applications for inter-chassis connections

Features

- Twelve-channel full-duplex transceiver modules (BOA)
- Twelve-channel transmitter and receiver modules (SNAP12)
- Maximum link length of 100m at 10 Gb/s on OM3 MMF or 70m at 25 Gb/s on OM4 MMF (BOA)
- Maximum link length of 600m at 2.5 Gb/s on OM3 MMF (SNAP12)
- Multirate capability: supports 1 Gb/s up to 28.05 Gb/s per channel



X2 (optical; longwave and shortwave)

DATACOM applications using 10G Ethernet

Features

- Supports bit rates up to 10.5 Gb/s
- Distances up to 10 km
- Digital diagnostics



Coherent (optical; longwave)

TELECOM 100Gb/s and 200Gb/s applications

Features

- Pluggable CFP2-ACO with analog interface
 - Analog host interface is compatible with any external DSP
 - Modulation format independent
- 5"x7" module supporting multiple modulation formats with internal DSP
 - Platform supports DP-BPSK, DP-QPSK, or DP-16QAM at up to 32Gbaud
 - Best in class OSNR performance



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 Fibre Channel
- Board-mounted for an edge optical interface or internal mounting
- Designed for rugged applications



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



SFF (optical; longwave and shortwave)

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

TELECOM applications using OC-3/STM-1, OC-12/STM-4 and OC-48/STM-16 across all reaches

Features

- Distances from very short links up to 80 km
- Wide operating temperature range
- Available in 2x5, 2x7 or 2x10. 2x7 and 2x10 incorporate digital diagnostics



Finisar's Patented Digital Diagnostics

Finisar's transceivers feature a microprocessor and diagnostics interface that provides 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 digital diagnostic functions provide network managers with a highly accurate, cost-effective tool for implementing reliable performance monitoring.



Technology Innovator.
Broad Product Portfolio.
Trusted Partner.

FINISAR[®]

1389 Moffett Park Drive
Sunnyvale, CA 94089-1133
Telephone: +1 408-548-1000
Sales: +1 408-541-5690

Email: sales@finisar.com
Blog: www.finisar.com/blogs/lightspeed
www.finisar.com

