

Broader compatibility giving you greater reach.

While most optical transceivers are defined by standard bodies or Multi-Source Agreements (MSAs), many optical switch and transport OEMs add information in the DOM that require match or the transceiver is not interoperable. ProLabs transceivers are the high-quality, dependable, cost-effective alternative. ProLabs offers all the standard transceiver packages including the code to be interoperable giving you a single source for your transceiver needs.

ProLabs offers an extensive range of optical and copper transceivers to fit your requirements.

All transceivers are standards-based and comply with the MSA.

Transceivers range from 100BASE-FX to 100Gb and cover optical and copper transceivers such as GBIC, SFP, Xenpak, X2, XFP, SFP+, QSFP+, CFP and QSFP28.

ProLabs transceivers are manufactured utilizing the highest quality components available. Our commitment to quality means we produce a consistent, standardized product, purpose-built for compatibility with today's top Original Equipment Manufacturer (OEM) specification.

We offer
a wide range
of supplies,
short delivery times
and in depth
knowledge.

Application

ProLabs provides four common distance ranges within each transceiver model:

SX/SR Short haul with a range up to 2km.
LX/LR Long haul with a range up to 10km.
We are also able to provide long haul with enhanced lasers capable of 40km.
EX/ER Extended reach with range up to 40km with GBIC/SFP as well as with 10Gb/s transceivers.
ZX/ZR/EZX Extended reach with range up to 120km with GBIC/SFP and 80km with 10Gb/s transceivers.

In addition to the basic form factors, ranges and data rates of pluggable optical transceivers, there are certain applications to be identified to select the most appropriate optical transceiver, such as: Ethernet, SONET, DWDM, CWDM, fiber channel, data rate, wavelength, fixed or variable rate and bi-directional or unidirectional.

Many transceivers are available in E-Temp (-50C to +850C) or I-Temp (-400C to +850C) ranges as well as C-Temp (00C to +700C).

Custom Solutions

ProLabs can provide technologies that are often not offered by the OEM platform. Custom solutions include:

2km SFP/GBIC over Multimode
40km SFP over 1310nm Single mode
Bi-directional SFP, 1490nm/1310nm, 60km
Bi-directional SFP, 1490nm/1310nm, 80km
10G copper SFP+
Single fiber, single channel CWDM transceiver

Product Overview

There are many forms of MSA standard pluggable optical transceivers, each with different distance range specifications, designed for different applications, data rates and connectors. The popular form factors are detailed below.

GBIC - First generation transceivers with SC fiber connectors, commonly used with Gb Ethernet and fiber channel, also available for CWDM with wavelength/channel options.

SFP - Small form factor pluggable transceivers, resulting in increased density, capable of data rates up to 6Gb/s, available in 850nm, 1310nm, and 1550nm, bi-directional option (1310nm/1490 or 1310nm/1550nm), and DWDM and CWDM wavelengths/channel options. Distances range up to 160km.

Xenpak - Larger form transceivers with capability of data rates up to 10Gb/s, with a range of a few meters up to 80km. DWDM and CWDM wavelengths/channel options.

X2 - Transceivers with the capability of data rates up to 10Gb/s, with a range of a few meters up to 80km. DWDM and CWDM wavelengths/channel options.

XFP - Transceivers with the capability of data rates up to 10Gb/s with a range of a few meters to 80km. DWDM and CWDM wavelengths/channel options, including tunable DWDM options.

SFP+ - Transceivers with capability of data rates from 8Gb/s to 10Gb/s, with range of a few meters up to 80km. DWDM and CWDM wavelengths/channel options. Full range of DAC/Twinax cables available.

QSFP+ - Quad small form factor pluggable transceivers, capable of data rates up to 40Gb/s. Range of passive DAC cables and AOC cables available.

CFP - Transceivers with capability of data rates up to 100Gb/s, with range of up to 10km. Suitable for use in Data Centers, metropolitan area networks, DWDM systems, IP switches and storage area networks.

QSFP28 - Quad small form factor pluggable transceivers, with capability of data rates up to 100Gb/s, and ranges up to 10km. Suitable for use in datacenters and large enterprise networks.

In addition to a wide array of optical SFPs/SFP+ transceivers, ProLabs also offers the following: RJ-45 electrical interface transceivers.

10/100/1000TX - ProLabs offer both SGMII and SERDES variants of this popular transceiver with 10/100/1000Mb Link speeds over standard Cat5 and above cabling.

10GE Copper SFP - The ProLabs SFP-10G-T is specifically designed for high speed communication links that require 10 Gigabit Ethernet over Cat 6a/7 cable.

IEEE 802.3bz/NBase-T SFP - The ProLabs NBase-T copper SFP transceiver is compliant with the IEEE 802.3bz standard and is specifically designed for high speed communication links that require 5G over Cat6a cable or 2.5G over Cat 5e cable.

Visit www.prolabs.com for more connectivity solutions.

