

10 Gb/s XPAK 850 nm Transceiver

INTRODUCTION

The SO-XPAK-SR1 is a highly integrated, serial optical transponder module for high-speed, 10Gbit/s data transmission applications. The module is fully compliant to IEEE 802.3ae standard for Ethernet and the 10GFC Rev. 4 Fiber Channel standard, making it ideally suited for 10 GbE datacom and storage area network (SAN / NAS). Designed for short range distances the transponder module comprises a transmitter with a vertical cavity surface emitting laser (VCSEL), a receiver with a PIN photodiode and a XAUI-Attachment Interface, an integrated Coder / Decoder and multiplexer / demultiplexer (SERDES: Serializer / Deserializer). The transceiver operates within a wide temperature range of 0°C to +70°C and offers optimum heat dissipation and excellent electromagnetic shielding. A 70 pin electrical connector and a duplex LC connector optical interface assure the X2 and XENPAK MSA compliant connectivity.

APPLICATIONS

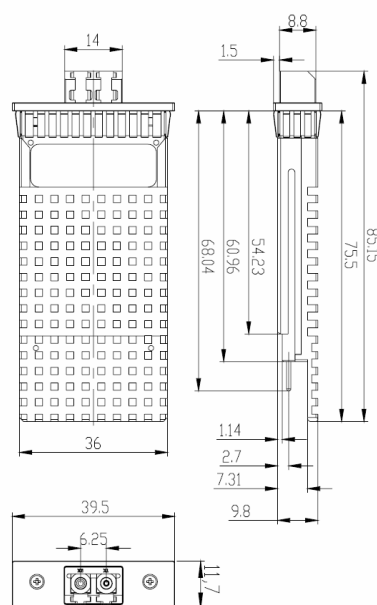
- IEEE 802.3ae 10GBASE-SR 10.3125 Gb/s
- 10GFC Rev.4.0 1200-Mx-SN-I 10.5128 Gb/s

FEATURES

- Compatible with XPAK MSA Rev. 2.3
- Compliant to IEEE 802.3ae 10GBASE-SR at 10.3125 Gbit/s
- Conforms with 10 Gigabit Fibre Channel 1200-M5-SN-I, 1200-M5E-SN-I, 1200-M6-SN-I at 10.51875 Gbit/s
- Up to 82 m transmission on 50/125 μ m MMF
- Up to 300 m transmission on special MMF
- Hot-Pluggable 70 pin connector with XAUI interface
- Management and control via MDIO 2-wire interface
- Vertical Cavity Surface Emitting Laser at 850 nm (VCSEL)
- Duplex LC-conector interface
- Compliant with the EU RoHS 6 Environmental Requirements

LASER SAFETY

This optical transceiver is a Class 1M laser product. It complies with IEC-60825 and FDA 21 CFR 1040.10 and 1040.11. The transceiver must be operated within the specified temperature and voltage limits. The optical ports of the module shall be terminated with an optical connector or with a dust plug.



Specification subject to change without notice.

Ordering Information:

Part no:	Description/Application
SO-XPAK-ETH-SR1	10 GBASE-SR 10.3125 Gb/s transceiver operates at 850 nm for 82 m of 50/125 MMF and 300 m of special MMF
SO-XPAK-10GFC-SR1	10GFC Rev.4.0 1200-Mx-SN-I 10.5128 Gb/s transceiver operates at 850 nm for 82 m of 50/125 MMF and 300 m of special MMF

Optical Parameters:

Part no.\Parameter	Wavelength [nm]	Opt. Output Power [dBm]	Opt. Receiver Sensitivity [dBm]	Power Budget [dB]
SO-XPAK-ETH-SR1	850 nm	-3 to -1	-11.5	8.5
SO-XPAK-10GFC-SR1	850 nm	-3 to -1	-11.5	8.5