

10 Gb/s XPAK 1310 nm Transceiver**INTRODUCTION**

The SO-XPAK-LR is a highly integrated, serial optical transceiver 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 (rack-to-rack, client interconnection) and storage area network (SAN / NAS). Designed for distances of up to 10km the transponder module comprises a transmitter with a directly modulated uncooled 1310nm DFB laser, a receiver with a PIN photodiode, a XAUI-Attachment Interface, an integrated Coder / Decoder and multiplexer / demultiplexer (SERDES: Serializer / Deserializer). The transponder 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 SC connector optical interface assure the X2 and XENPAK MSA compliant connectivity.

APPLICATIONS

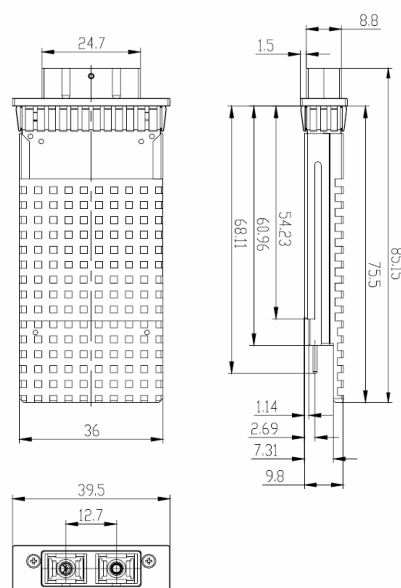
- IEEE 802.3ae 10GBASE-LR 10.3125 Gb/s
- 10GFC Rev.4.0 1200-SM-LL-L 10.5128 Gb/s

FEATURES

- Compatible with XPAK MSA Rev. 2.3
- Compliant to IEEE 802.3ae 10GBASE-LR at 10.3125 Gbit/s
- Conforms with Fibre Channel 1200-SM-LL-L at 10.51875 Gbit/s
- Up to 10 km transmission on 9/125 μ m SMF
- Laser Class 1 compliant
- Hot-Pluggable 70 pin connector with XAUI interface
- Management and control via MDIO 2-wire interface
- Uncooled 1310 nm DFB laser
- Duplex SC-connector interface
- Compliant with the EU RoHS 6 Environmental Requirements

LASER SAFETY

This optical transceiver is a Class 1 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-LR	10 GBASE-LR 10.3125 Gb/s transceiver operates at 1310 nm for 10 km
SO-XPAK-10GFC-LR	10GFC Rev.4.0 1200-SM-LL-L 10.5128 Gb/s transceiver operates at 1310 nm for 10 km transmission on SMF

Optical Parameters:

Part no.\Parameter	Wavelength [nm]	Opt. Output Power [dBm]	Opt. Receiver Sensitivity [dBm]	Power Budget [dB]
SO-XPAK-ETH-LR	1310 nm	-6 to -1	-12.6	6.6
SO-XPAK-10GFC-LR	1310 nm	-6 to -1	-12.6	6.6