

GL-OT-SGRJ45



10/100/1000BASE-T Copper SFP Transceiver

- Up to 1.25Gb/s bi-directional data links
- Hot-pluggable SFP footprint
- TX Disable and RX Los/without Los function
- Fully metallic enclosure for low EMI
- Low power dissipation (1.05 W typical)
- Compact RJ-45 connector assembly
- Access to physical layer IC via 2-wire serial bus
- 10/100/1000Mbps compliant in host systems with SGMII interface
- Operating case temperature range: 0 °C to +70 °C

Applications

- 1.25 Gigabit Ethernet over Cat 5 cable

Description

Copper Small Form Pluggable (SFP) transceivers is high performance, cost effective module compliant with the Gigabit Ethernet and 10/100/1000BASE-T standards as specified in IEEE 802.3-2002 and IEEE 802.3ab, which supporting 1000Mbps data rate up to 100 meters reach over unshielded twisted-pair category 5 cable.

The module supports 1000 Mbps full duplex data-links with 5-level Pulse Amplitude Modulation (PAM) signals. All four pairs in the cable are used with symbol rate at 250Mbps on each pair.

The module provides standard serial ID information compliant with SFP MSA, which can be accessed with address of A0h via the 2wire serial CMOS EEPROM protocol. The physical IC can also be accessed via 2wire serial bus at address ACh.



Low-speed signals, electronic characteristics

Parameter	Symbol	Min.	Max.	Unit
SFP Output LOW	VOL	0	0.5	V
SFP Output HIGH	VOH	host_Vcc -0.5	host_Vcc +0.3	V
SFP Input LOW	VIL	0	0.8	V
SFP Input HIGH	VIH	2	Vcc +0.3	V

High-speed electrical interface, transmission line-SFP

Parameter	Symbol	Min.	Typ	Max.	Unit
Line Frequency	fL		125		Mhz
Tx Output Impedance	Zout,TX		100		Ohm
Rx Input Impedance	Zin,RX		100		Ohm

Line Drawing

