

1.25Gbps Copper SFP Transceiver Models

General Characteristics (applies to most/all variants):

- ☆ **Data Rate:** Up to ~1.25 Gb/s bi-directional (i.e. standard Gigabit Ethernet over copper)
- ☆ **Cable Reach:** Up to 100 metres over unshielded twisted-pair (e.g. Cat5e/Cat6) copper cable
- ☆ **Compact RJ-45 Connector Assembly:** Standard copper Ethernet connector, familiar form factor for standard network cables
- ☆ **Form Factor / Interface:** SFP (Small Form-Pluggable) — plug-in module
- ☆ **Hot-pluggable SFP Footprint:** Can be inserted/removed without powering down host device
- ☆ **Fully Metallic Enclosure:** For shielding and EMI reduction
- ☆ **Low Power Dissipation:** Efficient power usage, reducing heating and compatibility issues
- ☆ **Compliance with Standards:** Generally built to meet IEEE 802.3 / 1000BASE-T specifications, ensuring compatibility for 1 Gbps Ethernet over copper
- ☆ **Accessible PHY Layer IC via 2-Wire Serial Bus (EEPROM / management):** The module's serial ID and the underlying physical layer IC can be accessed via I²C / 2-wire bus, which aids in management / compatibility.
- ☆ **Support for Standard Host-System Interfaces:** Modules available to operate via SerDes in hosts expecting 1000BASE-T or support SGMII interface for 10/100/1000 Mbps auto-negotiation.

Model	Ethernet Port Type	Media Type / Connector	Reach	Temp (°C)	Interface	Tx_DIS/PHY Reset	1000BASE-X Auto-Negotiation Enabled	Link Indicator on Rx_LOS Pin	Datasheet
SFP-GESD-T100CB	1000BASE-T	Copper / RJ-45	100m	0 to 70	SerDes	Yes	No	Yes	Download PDF
SFP-GESD-T100IB	1000BASE-T	Copper / RJ-45	100m	-40 to 85	SerDes	Yes	No	Yes	
SFP-GESG-T100CB	10/100/1000Mbps	Copper / RJ-45	100m	0 to 70	SGMII	Yes	Yes	Yes	
SFP-GESG-T100IB	10/100/1000Mbps	Copper / RJ-45	100m	-40 to 85	SGMII	Yes	Yes	Yes	