

# 4L-SFPTEFG

SFP+ 10/100/1000BASE-T, Cooper, DDM, RJ-45 Connector, 100m



## Applications

- Compliant with IEEE Std 802.3. 10BASE-T, 100BASE-T and 1000BASE-T
- Fast and Gigabit Ethernet over Cat5 cable
- Switch to Switch interface
- Router – Server interface
- Other links

## Features

- SFP Electric Transceiver
- SFP MSA Compliant
- Up to 100m links over Cat 5 cable
- Digital Diagnostic Monitoring
- MSA Compliant
- RoHS and Lead Free
- Operating temperature: 0°C ~ +70°C

## Description

The 4L-SFPTEFG is a 10/100/1000BASE SFP transceiver series for data communications over cooper cables such as Cat5 defined by IEEE 802.3 standards .

This module is designed to operate with 10BASE-T, 100BASE-T or 1000BASE-T, the band is usually set directly on the switch management interface.

## General Specifications – Absolute Maximum Ratings

Parameter	Symbol	Min	Recommended	Max
Max.LinkLength 1000BASE-T	$L_{max}$			100M on Cat 5
Storage Temperature	$T_c$	-40°C		+85°C
Operating Case Temperature	$T_c$	0°C		+65°C
Supply Voltage	$V_{cc}$	3.13V	3.3V	3.5V

## Electrical Specifications

Low-Speed Signals, Electronic Characteristics					
Parameter	Symbol	Min	Max	Unit	Notes/Conditions
SFP OutputLOW	$V_{OL}$	0	0.5	V	4.7k to 10k pull up to host_ $V_{cc}$ measured at host side of conector
SFP OutputHIGH	$V_{OH}$	-0.5	+0.3v	V	
SFP InputLOW	$V_{IL}$	0	0.8	V	4.7k to 10k pull up to $V_{cc}$ measured at SFPside of connector
SFP InputHIGH	$V_{IH}$	2	0.3	mV	

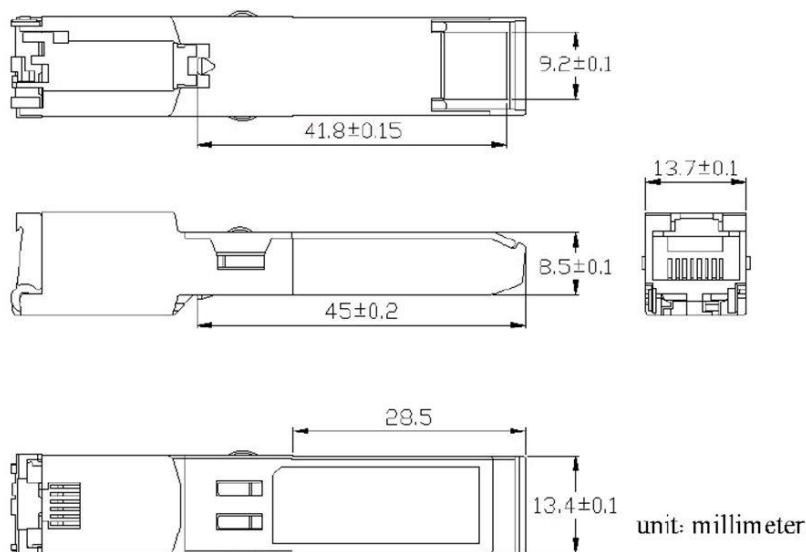
## Electrical Specifications

Parameter	Symbol	Min	Typ.	Max	Unit	Notes/Conditions
High-Speed Electrical Interface, Transmission Line-SFP						
Line Frequency	fL		125		MHz	level encoding perIEEE802.3
Tx Output Impedance	ZoutTX		100		Ohm	Differential for all frequencies between 1MHz and 125MHz
Rx Input Impedance	Zin RX		100		Ohm	Differential for all frequencies between 1MHz and 125MHz
High-Speed Electrical Interface, Host-SFP						
Single ended data input swing	Vinsing	250		1200	mV	Single ended
Single ended data output swing	Voutsing	350		800	mV	Single ended
Rise/Fall Time	Tr Tf		175		psec	20%-80%
Tx Input Impedance	Zin		50		Ohm	Single ended
Rx Output Impedance	Zout		50		Ohm	Single ended

## Electrical Specifications

Low-Speed Signals, Electronic Characteristics					
Parameter	Symbol	Min	Max	Unit	Notes/Conditions
SFP OutputLOW	VOL			V	kto k pull up to host_Vcc measured at host side of connector
SFP OutputHIGH	VOH	host_Vc c	host_Vcc	V	kto k pull up to host_Vcc measured at host side of connector
SFP InputLOW	VIL			V	kto k pull up to Vcc measured at SFPside of connector
SFP InputHIGH	VIH		Vcc	mV	kto k pull up to Vcc measured at SFPside of connector

## Mechanical Specifications



Quick access to other products:

[SFP 1G](#) [XFP10G](#) [XFP 10G](#) [QXFP40G](#) [SFP28 25G](#) [QSFP28 100G](#) [DWDM](#)

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## Ordering Information

Part Number	Description
4L-SFPTEFG	SFP 10/100/1000BASE-T, RJ45, DDM, 100m
4L-SFPT	SFP 1000BASE-T, RJ45, DDM, 100m
4L-SFPSXD	SFP 1000BASE-SX, 850nm, MM, DDM, LC Duplex, 300m
4L-SFPLXD	SFP 10GBASE-LX, 1310nm, SM, DDM, LC Duplex, 10Km
4L-SFPEXD	SFP 1000BASE-EX, 1550nm, SM, DDM, LC Duplex, 40Km
4L-SFPZXD	SFP 1000BASE-ZX, 1550nm, SM, DDM, LC Duplex, 80Km
4L-SFPZXDE	SFP 1000BASE-ZXE, 1550nm, SM, DDM, LC Duplex, 120Km

## Note

This modules have been tested by 4LAN on equipments like Cisco, Juniper, Dell, HP, Mikrotik, Huawei, and other brands. The equipment brand must be informed before shipping the order, so the transceivers are reprogrammed to the corresponding brand.

## Contact Information

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