



NBASE-T Copper SFP Transceiver

Copper SFP Speedy Series



10Gbps/5Gbps/2.5Gbps/1.25Gbps/100Mbps NBASE-T Copper SFP Transceiver

The AOPT-SFP-NBTI-RJ45 Copper SFP transceiver seamlessly bridges the new and old Ethernet standards gap between your NBASE-T client (such as IEEE 802.11ac 5G Wi-Fi AP) and 10G switch. The NBase-T SFP module is compliant with the IEEE 802.3bz standard to implement high-speed communication links over copper cable. It can either auto-negotiate optimal network speed-100M/1.25G/2.5G/5G/10G, or support fixed operating speed.

The NBase-T Copper SFP transceiver features simple application in data center for managers to leverage their installed base of switches and servers equipped with SFP+ empty cages, delivering 10G data rate over Cat6a/7 up to 30m. The hot swappable copper solution offers the new option of on-demand purchases and flexibility for network managers to optimize capital expense. The transceiver provides standard SFP MSA compliant serial ID information, which can be read/written via the 2-wire serial CMOS EEPROM protocol and its inside PHY IC can be accessed via 2-wire serial bus.

Features

- Supports 10Gbps links up to 30 m (Cat 6a/7 Cable)
- Supports 5Gbps links up to 100 m (Cat5e Cable)
- Low Power Consumption
- IEEE 802.3bz Compliant
- SFF-8431 and SFF-8432 MSA Compliant
- Access EEPROM/PHY IC via 2-wire Serial Bus
- I2C to MDIO Bridge (Support IEEE 802.3 Clause 45)
- Fast Retrain and EMI Cancellation Algorithm
- Compliant with RoHS
- +3.3V Single Power Supply
- Operating Case Temperature: -40°C to +85°C

Applications

- 802.11ac Wave-2 access point connectivity
- Data Center Migration
- 10Gbps Ethernet over Category 6a/7 Cable
- High speed I/O for file server or high-end workstation
- Switch/Router to Switch/Router Link



Specifications

Extension Range

Line Side (Auto-negotiation)	10Gbps/5Gbps/2.5Gbps/1Gbps/100Mbps
Host Side (Auto-rate matching)	10Gbps

Key Parameters

Bit rate support	10Gbps/5Gbps/2.5Gbps/1Gbps/100Mbps
Maximum link up distance	30m@10Gbps, 100m@100Mbps-5Gbps
Cable support	Cat6a/7 for 10Gbps, Cat5e for 100Mbps-5Gbps
Power consumption	TBD

Environmental

Case Temperature	-40°C~85°C Operating and Storage
Humidity	10-85% Operating, 5-90% Storage Relative Humidity Non-Condensing

Outline

13.66(W) x 67.77(D) x 176(H)mm
RJ-45 receptacle (Line side)
SFP+ 20 pin host contact (Host side)
Net weight : 25g

Package Contents

NBASE-T Copper Transceiver x 1pc	NBASE-T Copper Transceiver x 1 tray (10pcs)
Package weight: 285g (1 tray)	

Safety Regulation

CE and FCC Approved



Ordering Information

AOPT-SFP-NBTI-RJ45