NBASE-T Copper SFP

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

The AOPT-SFP-NBT-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 SPF+ empty cages, delivering 10G data rate over Cate6a/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 100M-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: 0°C to +70°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	2.26W@10Gbps, 1.93W@5Gbps, 1.6W@2.5Gbps

Environmental

Case Temperature	0℃-70℃ Operating, -10℃ +85℃ Storage
Humidity	10-85% Operating, 5-90% Storage Relative Humidity Non-Condensing

Outline

Size: 13.66(W) x 67.77(D) x 13.77(H)mm

RJ45 receptacle (Line side)

SFP+ 20 pin host contact (Host side)

Net weight : 25g

Package Contents

NBASE-T Copper Transceiver x1pc	NBASE-T Copper Transceiver x1tray (10pcs)
Package weight: 35g (1pcs)	Package weight: 285g (1tray)

Safety Regulation

CE and FCC Approved

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Ordering Information

AOPT-SFP-NBT-RJ45