

Copper SFP

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Variants

1G Ethernet 100M 10G 30M

Details

The **Optcore DT-Copper 1G** is a high-performance and cost-effective **Copper SFP Transceiver** designed for 10/100/1000BASE-T Ethernet applications. It complies with **SFP MSA, IEEE 802.3u, and IEEE 802.3ab** standards, ensuring seamless compatibility with switches, routers, firewalls, media converters, and networking equipment equipped with standard SFP ports.

Supporting transmission distances up to **100 meters** over Cat5e, Cat6, and Cat6a cabling, the module offers stable Gigabit connectivity while maintaining low power consumption and reliable operation.

Speed

1Gbps

Distance

100M

Connector

RJ45

Power Usage

1.05W

Key Features

? Supports 10/100/1000BASE-T Ethernet

? Up to 100m transmission over Cat5e / Cat6 / Cat6a

? Hot-pluggable SFP form factor

? SGMII interface support

? Fully metallic enclosure for low EMI

? Access to PHY configuration through I2C interface

Technical Specifications

Parameter	Specification
Model	DT-Copper 1G/10G
Product Type	Copper SFP Transceiver
Form Factor	Hot-Pluggable SFP
Data Rate	10 / 100 / 1000 Mbps or 10G

Parameter	Specification
Connector	RJ45 Female
Cable Type	Cat5e / Cat6 / Cat6a
Maximum Distance	100 Meters
Interface	SGMII
Digital Diagnostics	Not Supported
Operating Temperature	0°C to +70°C
Storage Temperature	-40°C to +85°C
Power Consumption	~1.05W
Weight	0.025 kg

Applications

Gigabit Ethernet LAN

Switch-to-Switch Connectivity

Router & Server Connections

Ethernet Media Converters

Enterprise Networks

ISP Infrastructure

Compliance Standards

Standards

SFP MSA, IEEE 802.3u, IEEE 802.3ab, IEC / EN 61000-4-2, IEC 60825, FDA 21CFR 1040.10 / 1040.11, RoHS Compliant

D-TECH Recommendation: Use high-quality Cat6 or Cat6a cabling to achieve the best Gigabit Ethernet performance and reliable transmission up to 100 meters.