

D-TECH Fiber Media converter SFP Single-Mode

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Variants

10G 1 SFP -1RJ 1G 1 SFP -1RJ

Details

10G Media Converter (RJ45 to SFP+)

The **10G Media Converter** is designed to convert Ethernet electrical signals into optical fiber signals for high-speed and long-distance transmission. It supports conversion between **10GBase-T copper Ethernet** and **10GBase optical fiber** standards including SR, LR, ER, and ZR.

By using different **SFP+ optical transceivers**, users can extend network connectivity from short-distance copper links to fiber transmission up to **100 km**. The converter provides stable, secure, and ultra-low latency transmission, making it suitable for data centers, enterprise networks, ISP backbone infrastructure, and high-speed fiber communication systems.

Key Features

High-performance Marvell chipset for stable and non-blocking transmission

Supports 10GBase-T to 10GBase-SR / LR / ER / ZR conversion

3R function support: Signal amplification, clock recovery, and regeneration

Ultra-low latency transmission below 20µs

Supports multiple wavelengths including 850nm, 1310nm, 1550nm, CWDM, and DWDM

Jumbo Frame support for high-throughput applications

Reliable isolation protection and secure data transmission

Compact and lightweight industrial design

Easy installation and maintenance

Compatible with Single Mode and Multimode fiber

Technical Specifications

Category	Specification
Ethernet Port	RJ45, 10Gbps, Distance up to 100m using CAT5e or higher
Fiber Port	1 × SFP+ Slot, 10Gbps
Fiber Type	Single Mode (9/125 μm), Multimode (50/125 μm, 62.5/125 μm)
Transmission Distance	550m to 100km depending on SFP+ optical module
Supported Wavelengths	850nm / 1310nm / 1550nm / CWDM / DWDM
Processing Type	Store and Forward
Transmission Mode	Full / Half Duplex Auto-Adaptive
MAC Table	2K
Buffer Size	1 Mbit
Latency	20 μs
Power Input	AC 100–240V, 50/60Hz
Working Voltage	5V / 4A or 12V
Power Consumption	0.75W – 3W

Category	Specification
Operating Temperature	-10°C to +55°C
Storage Temperature	-40°C to +70°C
Humidity	5% – 90% Non-condensing
Dimensions	117 × 85 × 21 mm
Weight	0.1 kg
Certification	CCC, CE, FCC, RoHS
Warranty	1 Year

Applications

10G Data Center Connectivity
Enterprise Fiber Networks
ISP Backbone Infrastructure
Long-Distance Fiber Communication
Telecom Transmission Systems
Cloud Computing Networks
High-Speed Storage Networks
Industrial Ethernet Applications

Note: Transmission distance depends on the selected SFP+ optical transceiver module and optical fiber quality.

