

Gigabit RJ45-to-SFP Media Converter, QoS, 9K Jumbo Frames, 4 kV Port Protection

Fiber Optics / Media Converters

1 × RJ45 10/100/1000 Mbps + 1 × SFP 1.25 Gb/s. QoS, storm suppression, 9K jumbo frames and latency $\leq 20 \mu\text{s}$. 5 V / 1 A adapter included; SFP sold separately.



CONVERSOR GIGABIT RJ45 A SFP

RJ45 10/100/1000 Mbps · SFP 1,25 Gb/s

1 unidad · Módulo SFP no incluido

KG-FMC-1G-SFP

KG-FMC-1G-SFP

Brand
KONGIA

Product
Gigabit media converter with 1 RJ45 port and 1 SFP slot

Commercial configuration
1 desktop device with external power supply

Key features

- Gigabit RJ45 + SFP: 1 port of 10/100/1000 Mbps and 1 optical slot of 1.25 Gb/s.
- Fiber to suit the project: Selection of single-mode, multimode or BiDi SFP; reach according to module and link.
- QoS and flow control: IEEE 802.1p, IEEE 802.3x, back pressure and broadcast storm suppression.
- 9K jumbo frames and low latency: Buffer of 1 Mbit, 2K MAC table and latency $\leq 20 \mu\text{s}$.
- 4 kV protection: Port surge protection and optical link isolation.
- Compact and efficient: 94 × 70 × 26 mm, 150 g, consumption of 0.75–3 W and included 5 V / 1 A adapter.

Technical specifications

Parameter	Specification
Brand	KONGIA
SKU	KG-FMC-1G-SFP
Product	Gigabit media converter with 1 RJ45 port and 1 SFP slot
Commercial configuration	1 desktop device with external power supply
Ethernet conversion	10/100/1000BASE-T to 1000BASE-SX/LX

Technical specifications

Parameter	Specification
Copper port	1 × RJ45 10/100/1000 Mbps with autonegotiation
Optical port	1 × SFP slot of 1.25 Gb/s, full duplex
Autonegotiation	10/100/1000 Mbps speed, MDI/MDI-X and full/half duplex on copper
Copper cable	UTP Cat.5e or higher
Copper reach	Up to 100 m
SFP module	Not included; selected separately according to fiber and reach
Fiber types according to module	Single-mode 9/125 μm; multimode 50/125 μm or 62.5/125 μm
Single-fiber single-mode	Supported with an appropriate BiDi SFP module
Wavelengths	850 / 1310 / 1490 / 1550 nm, depending on the selected module
Optical reach	550 m to 100 km, depending on SFP module, fiber type and optical budget
Optical connector	Determined by the installed SFP module
Ethernet standards	IEEE 802.3 (10BASE-T), IEEE 802.3u (100BASE-TX/FX), IEEE 802.3ab (1000BASE-T), IEEE 802.3z (1000BASE-SX/LX)
Additional standards	IEEE 802.3x (flow control), IEEE 802.1Q (VLAN), IEEE 802.1p (QoS), IEEE 802.1D (Spanning Tree)
QoS	Supported, to prioritize packet transmission
Broadcast storms	Broadcast storm suppression
Flow control	IEEE 802.3x and back pressure
Jumbo frames	Up to 9 Kbytes
Forwarding	Store-and-forward
MAC table	2K addresses
Frame memory	1 Mbit
Network latency	≤ 20 μs
Port protection	Surge protection up to 4 kV
Isolation	Isolation between copper and fiber media
LED indicators	Optical/electrical link and activity status; the panel shows 1000/100, FX/TX, Link/Act, FDX and PWR
Included adapter	5 V DC / 1 A, US plug

Technical specifications

Parameter	Specification
Adapter input	100–240 V AC, 50/60 Hz
Operating voltage	5 V DC
Power connector for this version	DC barrel jack, center positive
Power consumption	0.75–3 W
Thermal design	Low-power chip, ventilated housing and low heat generation
Operating temperature	–10 °C to +55 °C
Storage temperature	–40 °C to +70 °C
Operating humidity	5–90 %, non-condensing
Device weight	0.15 kg, externally powered version
Housing and color	Metal, black
Adapter plug options	US plug as standard; Chinese or European plugs optional
Dimensions per unit	94 × 70 × 26 mm (depth × width × height)
KONGIA warranty	2 years

Applications

Copper-to-fiber conversion to extend networks between buildings and technical rooms.

Connection of IP cameras, computers, wireless access points or VoIP phones as remote Ethernet devices.

Adaptation to single-mode, multimode or BiDi fiber by selecting a compatible SFP.

Interconnection with another converter or compatible optical switch; the second device and optical modules are purchased separately.

An additional switch is required to connect several Ethernet devices simultaneously: the converter has a single RJ45 port.

Packaging & contents

1 × Gigabit RJ45-to-SFP converter, externally powered version 1 × 5 V DC / 1 A adapter, 100–240 V AC 50/60 Hz input, US plug Installation Guide SFP module and fiber cable not included. European or Chinese plug optional.

Warranty

2-year KONGIA warranty against manufacturing defects.