Compact Industrial Fiber Media Converter

Model: FCM-1100-G1Q1

Gigabit RJ45 · 100/1000 Mbps SFP
USB Type-C 5 V · Optional PoE PD input



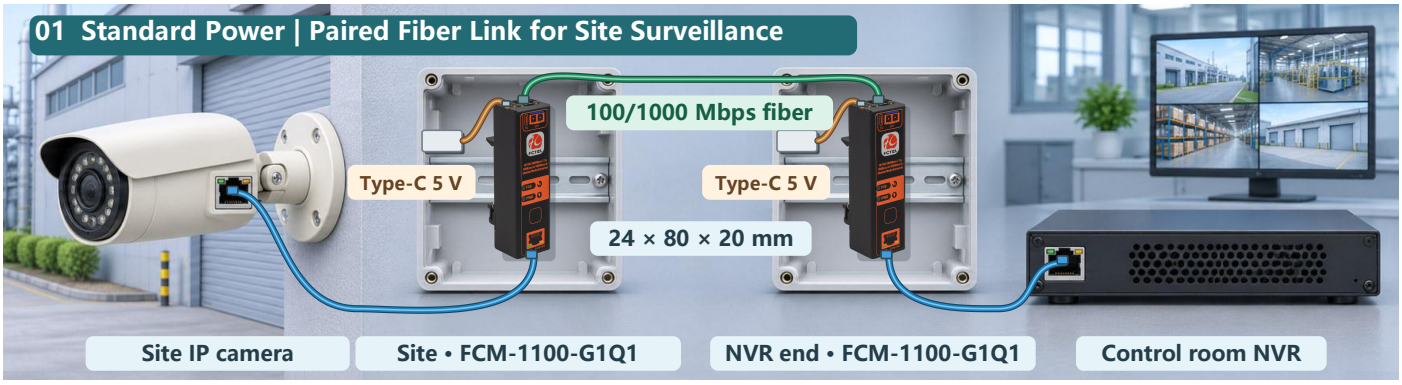
Overview

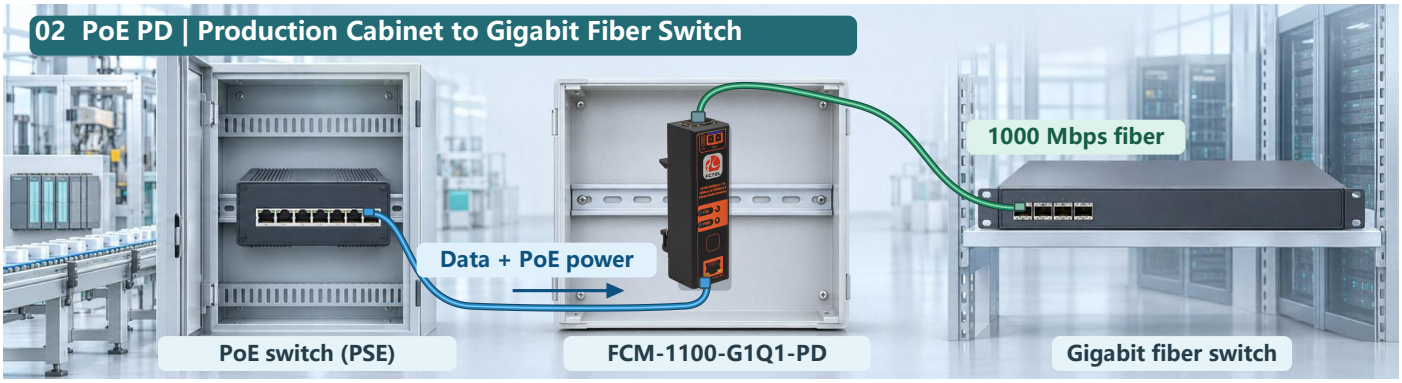
- Extends industrial Ethernet by converting 10/100/1000BASE-T to 100/1000 Mbps fiber.
- Choose duplex multimode, duplex single-mode or single-fiber single-mode SFPs. Reach options are 20, 40, 60, 80 or 120 km.
- The compact, low-power 24 × 80 × 20 mm unit mounts on a 35 mm DIN rail or a wall to save cabinet space.

Key Features

- **Ports** 100/1000 Mbps auto-sensing fiber and tri-speed RJ45 with Auto-MDIX.
- **Power** USB Type-C 5 V input. The -PD version can draw power via RJ45.
- **Surge** 3-stage RJ45 protection, 4 kV peak.
- **Field use** -40 to +85 °C. Fanless cooling, status alarms and broadcast storm protection.

Applications



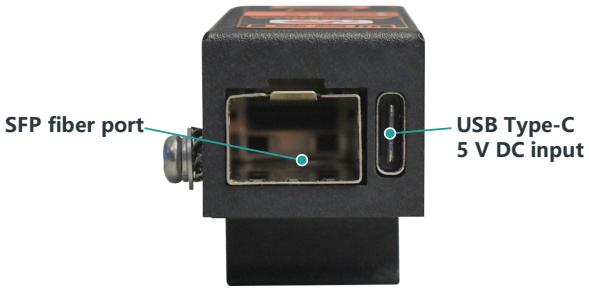


Use two converters over fiber or connect one to a 100 Mbps or 1 Gbps fiber switch.
Match the link speed, wavelength and fiber type at both ends.

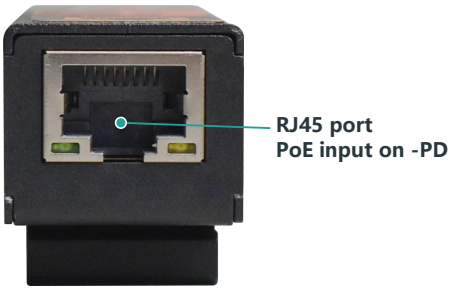
Address: 7F, Building 2, NO.9 XiYuan 2nd Road, West Lake Technology Park, Hangzhou, China.
Website: www.fctele.com Email: service@fctele.com Tel.: +86 18966484617

Interfaces and Mounting

Ports and Power Input

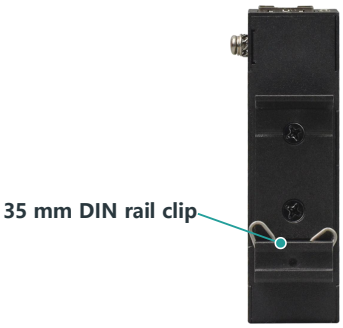


Top · SFP fiber port and power input

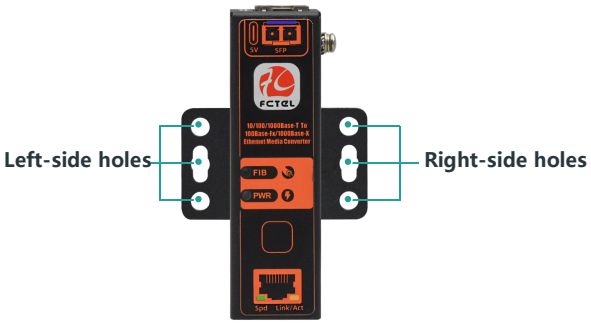


Bottom · Gigabit RJ45 port

Mounting Hardware



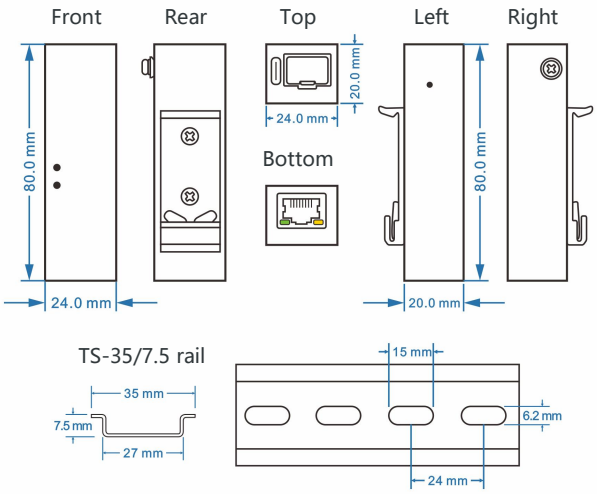
Rear · 35 mm DIN rail mounting



Bracket · Wall mounting

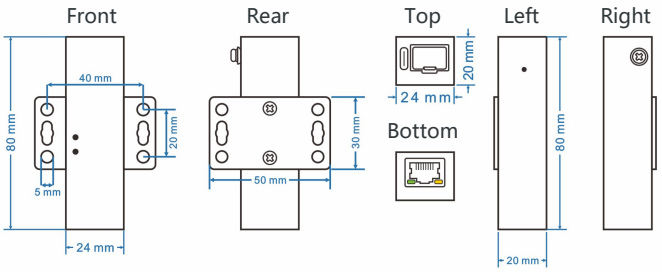
Enclosure and Mounting Dimensions

Enclosure dimensions: 24 × 80 × 20 mm (L × W × H). Drawing dimensions are in mm.



Weight: 70.5 g

DIN rail mounting dimensions and rail profile



Wall-mount bracket dimensions

Address: 7F, Building 2, NO.9 XiYuan 2nd Road, West Lake Technology Park, Hangzhou, China.
Website: www.fctele.com Email: service@fctele.com Tel.: +86 18966484617

Technical Specifications

Parameter	Specification
Fiber port	1 × SFP, auto-sensing 100BASE-FX / 1000BASE-X, LC fiber connector.
Fiber options	Duplex multimode (850 / 1310 nm), duplex or single-fiber single-mode (1310 / 1550 nm).
Fiber reach	20 / 40 / 60 / 80 / 120 km, depending on the SFP and optical link conditions.
Typical optical TX power	Single-mode: 100 µW to 0.93 mW.
Copper Ethernet port	1 × RJ45, 10/100/1000 Mbps and full/half-duplex auto-negotiation, Auto-MDIX.
Ethernet standards	IEEE 802.3ab and IEEE 802.3z.
Frames and switching	Ethernet and VLAN jumbo frames up to 10 KB. Compatible with IEEE 802.1Q switches.
MAC and traffic	4,096 learned MACs, broadcast storm protection, traffic balancing, collision isolation and error detection.
Status and alarms	Device status indicators and alarms.
RJ45 surge protection	Three-stage protection. Peak open-circuit test voltage of 4 kV.
Lightning and surge test: GB/T 17626.5 (IEC 61000-4-5) · Open-circuit voltage waveform: 10/700 µs · Test source impedance: 40 Ω	
Power input	USB Type-C, 5 V DC. The -PD option can also draw power via RJ45 from an upstream PoE PSE.
Enclosure and mounting	IP40, 24 × 80 × 20 mm (L × W × H), 70.5 g. Fanless. Mounts on 35 mm DIN rail or a wall.
Temperature range	Operating and storage: -40 to +85 °C.
Operating humidity	0% to 95% RH, non-condensing.
Reliability and testing	MTBF > 100,000 hours. 100% burn-in testing across all models.

Ordering Information

FCM	1100	G1	Q1	[-PD]
Brand prefix	Product series	Gigabit RJ45	100/1000 Mbps SFP	Optional PoE PD

Model Code Definitions

NO	Code	Definition
01	FCM	Fei Chang product prefix.
02	1100	Product series.
03	G1	One Gigabit RJ45 port, 10/100/1000 Mbps.
04	Q1	One auto-sensing 100/1000 Mbps SFP fiber port.
05	-PD	Suffix for the optional PoE PD input via RJ45.

Orderable Models

Order code	Configuration
FCM-1100-G1Q1	Standard model with USB Type-C 5 V input.
FCM-1100-G1Q1-PD	PoE PD model with USB Type-C 5 V input or power via RJ45 from an upstream PoE PSE.

Select SFPs to match the fiber type, strand count, link speed and required reach.

Document version: V1.5 EN Revision date: 2026-11-15

Address: 7F, Building 2, NO.9 XiYuan 2nd Road, West Lake Technology Park, Hangzhou, China.
Website: www.fctele.com Email: service@fctele.com Tel.: +86 18966484617