

Gigabit Ethernet Copper-to-Fiber Media Converter, SM LC, 20km, 10/100/1000 Mbps, RJ45 to LC, Full Metal, 9K Jumbo Frames, TAA Compliant

Product ID: MCM1110SMLC20



This Gigabit Ethernet to fiber media converter offers a reliable way to extend your network up to 20 km (12.4 mi) using single-mode LC fiber, providing increased range, enhanced security, and reduced interference compared to copper-based connections. It's TAA compliant and designed for government and commercial applications where long-distance and rack-mountable fiber access is needed.

Convert 10/100/1000 Mbps RJ-45 to Gigabit LC fiber using a media converter that complies with IEEE 802.3 standards. It supports full/half duplex, auto-negotiation, MDI/MDI-X, and 9K jumbo frames for high-performance networking in mixed copper-fiber environments.

Built with a compact full metal chassis, this converter includes LED indicators for power and link activity, plus a DIP switch to enable Link Fault Passthrough (LFP) with LLCF/LLR for easier network troubleshooting and reliability.

Deploy in minutes with plug-and-play setup and multiple mounting options including wall-mount, DIN-rail, or media chassis installation. It includes a 5V DC, 2A power adapter, making it ideal for server rooms or network closets.

Certifications, Reports and Compatibility



Applications

Features

- **Extend Ethernet Over Extraordinary Distances**: Convert and extend a 10/100/1000 Mbps Ethernet signal to Gigabit single-mode LC fiber, up to 20km (12.4mi); For specialized edge, industrial / remote deployments requiring long-range, secure wired connectivity
- **Reliable Performance & Diagnostics**: Compatible with 1000BASE-T (IEEE 802.3ab) and 1000BASE-LX (IEEE 802.3z); Supports full/half duplex, 9K jumbo frames, auto-negotiation, and auto MDI/MDI-X; DIP switch enables Link Fault Passthrough (LFP) with LLCF/LLR
- **Durable, Compact Design**: All-metal chassis provides strong shielding and long-term durability, while the compact size fits easily into tight spaces; Built-in LED indicators make it easy to monitor link, power, and activity at a glance
- **Install Flexibly in Any Environment**: Plug-and-play media converter supports wall, DIN rail, or chassis mounting for secure placement in server rooms or network closets; Includes a 5V DC power adapter for consistent operation
- **The IT Pro's Choice**: Engineered for edge, on-prem, and aerospace/defense applications requiring compliant connectivity; TAA certified and lab-tested for mission-critical reliability and backed by free lifetime 24/5 multilingual technical support

Hardware

Warranty	2 Years
PoE	No
WDM	No
Industry Standards	IEEE 802.3ab 1000BASE-T
	IEEE 802.3z 1000BASE-LX
	IEEE 802.3 10BASE-T
	IEEE 802.3u 100BASE-TX

Performance

Maximum Data Transfer Rate	2 Gbps (Full-Duplex)
Max Transfer Distance	20 km (12.4 mi)
Type	Single Mode
Wavelength	1310nm
Fiber Operating Mode	Half/Full-Duplex
Flow Control	None
Remote Management	No

Ability

Compatible Networks	1000 Mbps (1 Gbps)
Auto MDIX	Yes
Jumbo Frame Support	9K max.
Switching Architecture	None
MTBF	50,000 Hours

Connector(s)

Local Unit Connectors	1 - Fiber Optic LC Duplex
	1 - RJ-45

Indicators

LED Indicators	1 - PWR
	1 - RPF
	1 - LFP
	1 - LNK
	1 - LINK - RJ45
	1 - FULL - RJ45

Power

Power Source	AC Adapter Included
Input Voltage	100 - 240 AC
Input Current	0.4 A
Output Voltage	5 DC
Output Current	2 A
Center Tip Polarity	Positive
Plug Type	M
Power Consumption (In Watts)	4.6

Environmental

Operating Temperature	0C to 50C (32F to 122F)
Storage Temperature	-10C to 70C (14F to 158F)
Humidity	5~95% RH (Non-condensing)

Physical Characteristics

Color	Black
Material	Metal
Product Length	2.8 in [70 mm]
Product Width	3.7 in [94 mm]
Product Height	3.7 in [94 mm]
Weight of Product	0.0 lb [0.0 kg]

Packaging Information

Package Length	11.0 in [28.0 cm]
Package Width	5.2 in [13.3 cm]
Package Height	2.6 in [6.6 cm]
Shipping (Package) Weight	11.6 oz [328.0 g]

What's in the Box

Included in Package	1 - Media Converter
	1 - Universal Power Adapter
	1 - Product Documentation

Warranty Information

Warranty	2 Years
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**Product appearance and specifications are subject to change without notice.*