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Spec Sheet

Gigabit Ethernet Copper-to-Fiber Media Converter - SM LC - 20 km

StarTech ID: ET91000SM20



This Gigabit Ethernet to fiber media converter is a cost-effective way to extend your network, or extend the distance between two devices by up to 20 km (12.4 mi.).

Fiber network connections provide greater distance and security, with less electromagnetic interference (EMI) than typical RJ45 copper-based networks, making it perfect for IT professionals and secure setups in government, business, or educational applications.



Flexible integration into mixed network environments

This versatile copper-to-fiber converter supports standalone operation, or alternatively it can be installed into the StarTech.com Rackmount Chassis (ETCHS2U - sold separately), giving you more options for integration into your existing network. The card module can also be inserted back into the ET91000SM20 enclosure, plus it's compatible with enclosures from other StarTech.com ET91000 series media converters (sold separately).

The converter features a pre-installed Gigabit SFP transceiver with LC connectors. Should your network infrastructure change in the future, you can easily swap and replace the module to adapt the media converter to your new network requirements.

With flexible integration and connectivity up to 20 km away, you can provide network access to remote areas in other buildings, or in areas where Wi-Fi® is unreliable or unavailable.

Rugged and reliable

This heavy-duty fiber media converter is designed for maximum reliability. It features a metal (steel) enclosure, so it can withstand the demands of harsh environments such as factories or warehouses.

Plus, by relying on this more durable fiber media converter, you can reduce the strain on your existing copper-based network equipment and potentially extend the life of those devices, which helps save future expenses.

Diagnose and correct issues easily

This high-performance media converter supports a range of network setup and diagnostic protocols (for example, Link Fault Passthrough, Auto Laser Shutdown (ALS), and Auto MDIX, so you can set up and troubleshoot your network easily.

Prepare your network for the future

If your existing network consists of RJ45 copper-based devices and cables, you might not be ready for future network expansion. Because the newest fiber-based network switches feature SFP ports more often than RJ45 ports, you might need a converter to bridge your copper and fiber networks together.

The ET91000SM20 is backed by a StarTech.com 2-year warranty, and free lifetime technical support.

Applications

- Can be installed into the StarTech.com 20U rackmount chassis (ETCHS2U - sold separately)
- Use fiber optic cable to connect to your network from remote areas or separate buildings, at greater distances than copper (RJ45) cable allows
- Perfect for secure connections required by government agencies where EMI isn’t acceptable
- Easily expand the number of ports on your existing network now, or in the future — perfect for small and medium businesses

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Features

- Flexible network integration, with support for standalone operation, or installation into the StarTech.com [%product id="ETCHS2U" text="rackmount chassis"%] (ETCHS2U - sold separately)
- Converts copper to fiber and extends your network up to 20 km (12.4 mi.) using single-mode LC fiber-optic cable (1310 nm)
- Removable SFP module (LC fiber connector) can be replaced should your network infrastructure change
- Supports Link Fault Passthrough (LFP), Auto Laser Shutdown (ALS), and Auto MDIX
- Up to 9.6K Jumbo Frame support
- Supports full or half-duplex operation, as well as autonegotiation or forced mode
- Media converter's card module is compatible with enclosures from other StarTech.com ET91000 series media converters (sold separately)
- Compatible with Gigabit (1000Mbps) copper (IEEE 802.3ab, 1000BASE-T) and fiber (IEEE 802.3z, 1000BASE-LX) protocols
- Fast, hassle-free setup
- Rugged steel enclosure

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Technical Specifications

Warranty	2 Years
Industry Standards	IEEE 802.3ab (1000BASE-T)
Industry Standards	IEEE 802.3z (1000BASE-LX)
PoE	No
WDM	No
Auto MDIX	Yes
Compatible Networks	1000 Mbps (1 Gbps)
Fiber Operating Mode	Half/Full-Duplex
Fiber Type	Single Mode
Flow Control	None
Jumbo Frame Support	9.6K max.
Max Transfer Distance	20 km (12.4 mi)
Maximum Data Transfer Rate	2 Gbps (Full-Duplex)
MTBF	65,000 Hours
Remote Management Ability	No
Switching Architecture	None
Wavelength	1310nm
Local Unit Connectors	1 - Fiber Optic LC Duplex Female
Local Unit Connectors	1 - RJ-45 Female
System and Cable Requirements	The media converter can only be used with Gigabit SFP modules, and will not support 10/100Mbps modules.
LED Indicators	1 - PWR
LED Indicators	1 - RPF
LED Indicators	1 - LFP
LED Indicators	1 - LNK
LED Indicators	1 - LINK - RJ45
LED Indicators	1 - FULL - RJ45
Center Tip Polarity	Positive
Input Current	0.48 A
Input Voltage	100 ~ 240 AC
Output Current	1.6 A
Output Voltage	12 DC

Plug Type	M
Power Consumption	19.2 W Max.
Power Source	AC Adapter Included
Humidity	10~90% RH (Non-condensing)
Operating Temperature	0°C to 50°C (32°F to 122°F)
Storage Temperature	-10°C to 70°C (14°F to 158°F)
Enclosure Type	Steel and Plastic
Product Height	0.9 in [23 mm]
Product Length	6.3 in [159 mm]
Product Weight	14.5 oz [410 g]
Product Width	3.5 in [88 mm]
Shipping (Package) Weight	1.7 lb [0.8 kg]
Included in Package	1 - Gigabit Ethernet fiber media converter
Included in Package	1 - universal power adapter (NA/EU/UK/AU)
Included in Package	1 - instruction manual

Certifications, Reports and Compatibility

RoHS Compliant Available