TMC-GSFP Series













INCLUDED*

-40° то +75° С

FLEXIBILITY

30W POE+

CONVERTER



The TMC-GSFP electrical-to-optical Ethernet media converters accept a 10/100 or 1000 Mbps electrical input and converts to a 100 or 1000 Mbps optical output (selected by a dip switch) and the 100/1000 Mbps optical input back to the 10/100/1000 Mbps electrical output. "Auto-Negotiating" is supported on the copper interface side. These devices use either one or two optical fibers, depending upon the selection of sold-separately SFP[†] optical module.

A PoE model, the TMC-GSFPPOEM meets the IEEE802.3at standard and provides 30 watts of PoE+ power.

The series consists of small size single channel models, TMC-GSFPM & TMC-GSFPPOEM, and a standard size, single-channel model, TMC-GSFP. The standard size unit may be directly plugged into the SBP-C14 / SBP-C03 Rack or operated as a standalone module. The small size unit operates as standalone modules only.

FEATURES

- > Full-duplex transmission of 10/100/1000 Mbps Ethernet
- 10/100/1000BASE-TX electrical port
- 1000BASE-FX or 100BASE-FX optical port when used with suitable SFPs
- > IEEE 802.3 compliant
- > 10/100/1000 BASE-TX port supports auto-negotiation and automatic MDI/MDI-X crossover for full and half-duplex operation
- > Uses customer-installed SFPs for compatibility with a wide range of optical fibers, optical connector types, and optical transmission distances of up to 120 km
- > Designed for installation in harsh out-of-plant/unconditioned industrial or roadside operating environments (-40° to +75°C ambient). Fully compliant with the environmental requirements of NEMA TS-2 for Traffic Signal Control Equipment
- > Voltage transient protection on all power and signal input/ output line provide protection from voltage surges and other transient events
- > Mini-package size of the TMC-GSFPM allows the unit to be installed in those locations where space is at a premium.
- > Supports Jumbo Frames up to 10K Bytes for streaming video applications

- > Bi-color LED status indicators confirm operating status
- > Available in standalone small size, or standard size, which is interchangeable between stand-alone or hot-swappable rackmount use

APPLICATIONS

- > Optical transmission of Ethernet-compatible industrial security access control systems, intercom systems, VoIP (Voice over IP) telephony networks, and IP-compatible CCTV camera surveillance networks
- > Optical Ethernet transmission to wireless LAN access points
- > Industrial Security, Transportation/ITS, and Industrial Control/ Factory Automation IP Networks
- > Optical transmission of any Ethernet-compatible equipment with a maximum data rate of 100 Mbps or 1000 Mbps



* Power Supply for PoE applications is sold separately. † Small Form-Factor Pluggable (SFP) Module. Sold separately.



SPECIFICATIONS

Data

Data Interface Ethernet

Data Rate 10/100/1000 Mbps

IEEE 802.3 Compliant

Full Duplex or Half Duplex Electrical Port/ Full

Duplex Optical Port

Connectors

Power Terminal Block
Optical SFP dependent
Electrical RJ45

Fibers¹ SFP Dependent

Fiber Connectors Requires selection of sold-separately SFP modules.

See Hanwha Techwin Wisenet SFP datasheet for

model and description of SFP modules.

Power

Operating Voltage Range TMC-GSFP / TMC-GSFPM: 9-24 VDC

or 24 VAC

TMC-GSFPPOEM: 48 - 57 VDC @ 0.85A

Power Consumption TMC-GSFP / TMC-GSFPM:2.5W

TMC-GSFPPOEM: 35W (with full PoE+ load)

Current Protection Automatic Resettable Solid-State Current Limiters

Electrical & Mechanical

LED Indicators Optical Link/Data Activity > Power

> POE Enabled (TMC-GSFPPOEM only)

Circuit Board Meets IPC Standard

ComFit Size $6.1 \times 5.3 \times 1.1 \text{ in } (15.5 \times 13.5 \times 2.8 \text{ cm})$

ComFit Rack Slots

Mini Size 3.3 x 2.5 x 1.1 in (8.4 x 6.4 x 2.8 cm)

Shipping Weight <2 lbs./0.9 kg

Environmental

 $\begin{array}{ll} \text{MTBF} & > 100,000 \text{ hours} \\ \text{Operating Temp} & -40^{\circ} \text{ C to } +75^{\circ} \text{ C} \\ \text{Storage Temp} & -40^{\circ} \text{ C to } +85^{\circ} \text{ C} \end{array}$

Relative Humidity 0% to 95% (non-condensing)

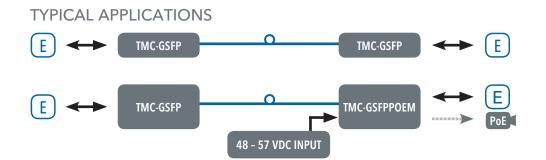
[1] Multimode fiber needs to meet or exceed fiber standard ITU-T G.651. Single mode fiber needs to meet or exceed fiber standard ITU-T G.652

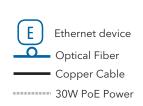


ORDERING INFORMATION

Part Number	Description	# Rack Slots
TMC-GSFPM	10/100/1000Mbps Multi-Rate Media Converter, 100FX/1000FX Selectable, Small Size	N/A
TMC-GSFPPOEM	10/100/1000Mbps Multi-Rate Media Converter, 100FX/1000FX Selectable, Small Size, PoE+	N/A
TMC-GSFP	10/100/1000Mbps Multi-Rate Media Converter, 100FX/1000FX Selectable	1
Included Accessories	DC Plug-in Power Supply, 90-264 VAC, 50/60 Hz (Included with TMC-GSFPM / TMC-GSFP, for benign 0 to 50°C applications. Hardened power supply available)	
Options	PWR-DR48060 48 Volt DC Plug-in Power Supply for use with TMC-GSFPPOEM model only	
	User selection of Wisenet SFP (see SFP Modules data sheet for product numbers and compatibility before ordering)	
	SBP-UDR DIN-Rail Mounting Adaptor Kit - With Mounting Hardware	
	PWR-DR12033 Hardened power supply for use with TMC-GSFPM / TMC-GSFP	
	SBP-C14 / SBP-C03 Card Cage Racks	

Note: In a continuing effort to improve and advance technology, product specifications are subject to change without notice.





Fiber Count, Type and Distance are dependent on SFP selection