

# Mini Unmanaged Gigabit Ethernet Media Converters Datasheet

EXCELLENT SOLUTION TO EXTENDING COMMUNICATION DISTANCE IN A NETWORK

Ideal for data center and small office network environment of enterprises.



## Overview

These Mini Unmanaged Gigabit Ethernet Media Converters provide an economical path to extend the distance of an existing network or the distance between two devices with high performance of data transmission via fiber optic cable. They can build the ISP network solution of FTTH or FTTC for ISPs and FTTBs, or for small office network environment of enterprises.

They can be used as standalone units when powered by their DC adapters or used in FS 12 Slots Mini Media Converter Chassis (MFMC-12DP). This media converter chassis can assist in producing power for these Mini Ethernet Media Converters.

## Benefits

- Comply with IEEE 802.3/802.3u/802.3ab/802.3z
- Prevent packet loss with back pressure and IEEE 802.3x pause frame flow control
- Choice of SC/LC SFP Connectors for MM & SM
- Support auto negotiation and auto MDI-MDIX
- Support full/half duplex mode
- LED Indicators Monitor Network Activity Easily
- DIP switch to set different configurations
- Plug-and-play, Standalone or Chassis Based

## Technical Specification

	UMC- GA1SC1T-SM	UMC- GA1SC1T-MM	UMC- GA1F1T	UMC- GA1F2T	UMC -2S
<b>Cooper Port (RJ45)</b>	1x10/100/1000M (Auto MDI/MDI-X)		2x10/100/1000M (Auto MDI/MDI-X)		--
<b>Fiber Port</b>	1xSC		1x SFP		2xSFP/SFP+
<b>Transmission Speed</b>	10/100Mbps for half/full duplex 1000Mbps for full duplex				100M/1.25/8.5/10G
<b>Cable Type (Fiber)</b>	SM Fiber Up to 10KM	MM Fiber 220/550M	SM & MM Fiber Depend on Plug-in Fiber Transceiver		
<b>Cable Type (Cooper)</b>	UTP Category 5, 5e, 6 Cable (Maxium 100m) EIA/TIA-568 100Ω STP (Maximum 100m)				
<b>Jumbo Frame</b>	12K		9K		16K
<b>LED Indicators</b>	TP/LNK, SPD, FX/LNK, PWR		TP/LNK,1000M, FX/LNK, PWR	TP1/LNK, TP2/LNK, FX/LNK, PWR	SFP2, LOOP, SFP1, PWR
<b>DIP Switch</b>	LFP Function FX Speed FX Reset	LFP Function FX Speed FX Reset	LFP/ALS FX Speed FX Reset	Jumbo Frame Port Isolation FX Speed	Loopback/LFP/ALS Transmission mode
<b>Power Consumption</b>	Full-load<3W				Full-load<5W
<b>External Power</b>	AC 100V~240V				
<b>Input Power</b>	DC 5-12V				
<b>Dimensions (Hx Wx D)</b>	0.79"x 2.36"x 3.54" (20x60x90mm)				
<b>Standards</b>	IEEE 802.3u/IEEE 802.3ab/IEEE 802.3z /IEEE 802.3x Flow Control		IEEE 802.3/IEEE 802.3u/IEEE 802.3ab /IEEE 802.3z/IEEE 802.3x		IEEE802.3an /IEEE802.3ae
<b>Operating Temp</b>	0°C to 50°C		0 to 40°C		0°C to 50°C
<b>Storage Temp</b>	-10°C to 70°C		-20°C to 85°C		-10°C to 70°C
<b>Relative Humidity</b>	5% to 90%, non-condensing				
<b>Latency</b>	1us	1us	1us	5us	3us
<b>MTBF</b>	> 50,000Hrs				
<b>Warranty</b>	Two Years				
<b>Certifications</b>	CE/RoHS/ FCC/REACH/RCM				

## DIP Switch Setting

**Model: UMC-GA1SC1T-SM/UMC-GA1SC1T-MM/UMC-GA1F1T**

NO	Function	Status	Description
1	LFP Function ①	OFF	Disable
		ON	Enable
2	ALS Function (Only for SFP) ②	OFF	Disable
		ON	Enable
3	FX Reset ③	OFF	Enable
		ON	Disable
4	FX Speed Set	OFF	FX 1000M
		ON	FX 100M/1000M

① LFP (Link Fault Pass Through) Function: If enabled, when a device is connected to the converter and the TP/fiber line loses the link, the converter's fiber will disconnect the link of transmit.

② ALS (Automatic Laser Shutdown) Function: If enabled, the output power of the SFP transmitter will be automatically shut down in case of fiber break.

③ FX Reset: If enabled, when FX link is down, the power will shut down, but a few seconds later the power will restart automatically.

**Model: UMC-GA1F2T**

NO	Function	Status	Description
1	Reserved	X	X
2	Jumbo Frame	OFF	Normal (Up to 1500Bytes)
		ON	Up to 9KB
3	Port Isolation ④	OFF	Disable
		ON	Enable
4	FX Speed Set	OFF	FX 1000M
		ON	FX 100M

④ If enabled, Layer 2 network traffic will not be forwarded between the two RJ45 ports in the same VLAN.

**Model: UMC-2S**

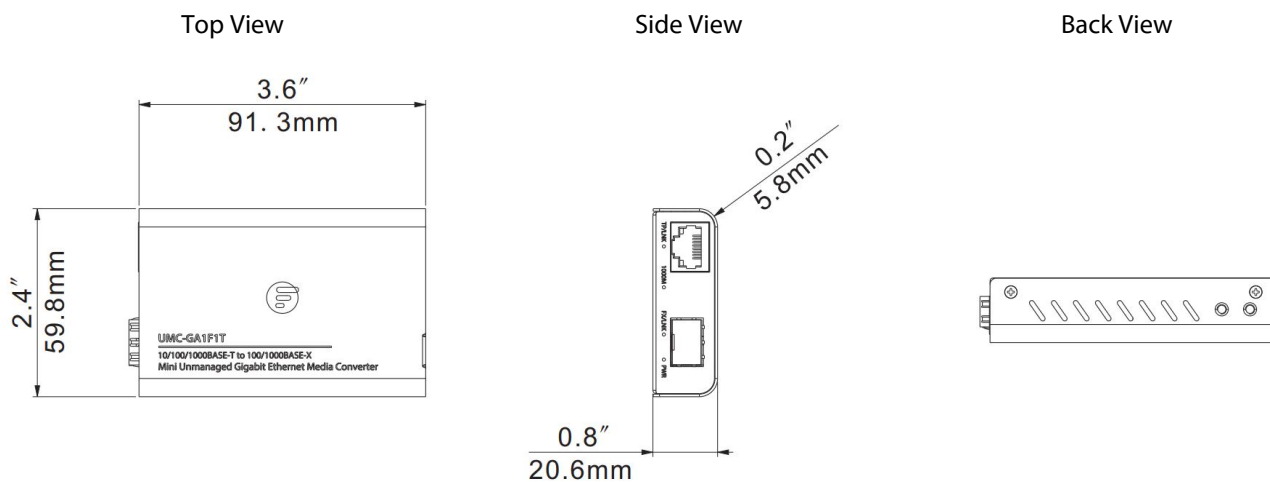
NO	Function	Status	Description
1	SW1 SW2 ⑤	OFF/OFF	125M-11.3G
		ON/OFF	10.35-11.7G
		OFF/ON	8.5G
		OFF/ON	N/A
2	SW3 SW4 ⑥	OFF/OFF	Normal
		ON/OFF	ALS Enable
		OFF/ON	LFP Enable
		OFF/ON	LOOP Enable ⑦

⑤ SW1 and SW2 are combination switches

⑥ SW3 and SW4 are combination switches

⑦ LOOP Function: Run a loop back test to check the interconnection between two Media Converter devices.

**Technical Drawing**





 <https://www.fs.com>



The information in this document is subject to change without notice. FS has made all efforts to ensure the accuracy of the information, but all information in this document does not constitute any kind of warranty.