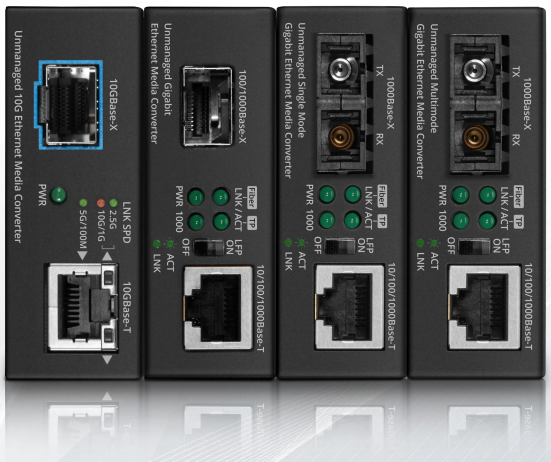
Unmanaged Ethernet Media Converter Datasheet

Flexible and Reliable Network Distance Extension Solution.



Overview

The Unmanaged Gigabit Ethernet Media Converter provides conversion between 10/100/1000Base-T and 1000Base-X. It is an ideal solution to extend the distance of an existing network, the distance of non-fiber based equipment, or the distance between two devices.

The Unmanaged 10G Ethernet Media Converter is equipped with one 10G/5G/2.5G/1G/100BASE-T auto-negotiation port and one 10GBASE-X SFP+ slot. It is designed for use in network environments where the ultra-high bandwidth provided by 10Gigabit Ethernet is required, for example, data center cloud computing, enterprise backbones, campus networks, and carrier infrastructure.

Benefits

- Store and Forward mechanism
- Auto-negotiation and auto-MDI/MDI-X supported
- IEEE 802.3x full-duplex flow control and back-pressure in half-duplex eliminate the loss of packets
- Non-blocking full wire-speed forwarding rate
- Automatic address learning and address aging
- TS-1000 OAM/IEEE 802.3ah/Loop Back Test

Key Features

Link Fault Pass Through Function

The Unmanaged Gigabit Ethernet Media Converters: UMC-1F1T, UMC-1SC1T-SM and UMC-1SC1T-MM provide DIP switch to disable or enable the Link Fault Pass Through Function. When the DIP switch is ON, the Link Fault Pass Through Function is enabled. Then if the TP line or fiber line of the device connected to the converter loses the link, the converter's fiber will disconnect the link of transmission. It can immediately alarm the administrators over the issue from the link media and provide an efficient solution to monitor the network power usage.

Moreover, the network manager can remotely control and monitor the Unmanaged Gigabit Ethernet Media Converter by OAM TS-1000 terminal function such as remote failure indication, loop back test, port status, performance monitoring and troubleshooting.

High Performance and Low Power Consumption

The Unmanaged 10G Ethernet Media Converter UMC-1S1T offers wire-speed packets transfer performance without the risk of packet loss. The high data throughput of the device makes it ideal for most Gigabit environments. With a 20Gbps internal fabric,16K jumbo frame feature and auto negotiation support in its 10 Gigabit port, the converter can handle extremely large amounts of data transmission in a secure topology linking to data center cloud computing, enterprise backbones, campus networks, and carrier infrastructure.

The Unmanaged 10G Ethernet Media Converter adopting the advanced chip technology has the power-saving feature like a low power consumption of only 3.75 watts when in full operation.

Easy Installation and Flexible Application

The Unmanaged Ethernet Media Converter can be used as a standalone unit on a desktop or shelf. The installation is quite quick and easy by simple plugging and playing feature.

The Unmanaged Gigabit Ethernet Media Converter can build the ISP network solution of FTTH (Fiber to the Home) or FTTC (Fiber to the Curb) for ISPs and FTTBs (Fiber to the Building), for small office network environment of enterprises.

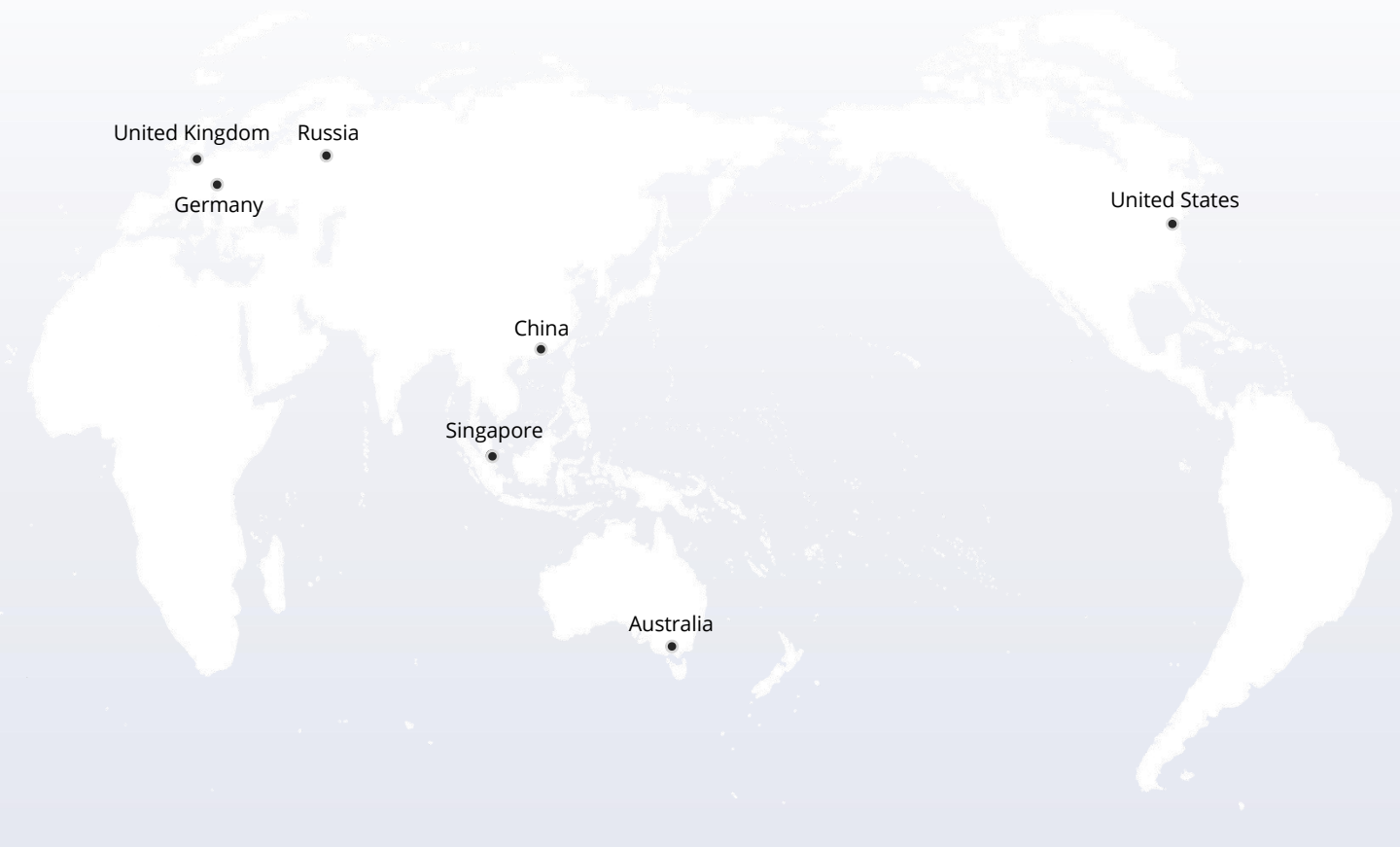
The fiber optic uplink capability of the Unmanaged 10G Ethernet Media Converter guarantees the throughput to all nodes hooked into the network. It is ideal for applications within data center cloud computing, enterprise backbones, campus networks, and carrier infrastructure.

Specification

	UMC-1S1T	UMC-1F1T	UMC-1SC1T-SM	UMC-1SC1T-MM
Copper Interface	1x 100/1G/2.5G/5G/ 10GBase-T RJ45	1x 10/100/ 1000Base-T RJ45	1x 10/100/ 1000Base-T RJ45	1x 10/100/ 1000Base-T RJ45
Fiber Optic Interface	1x 10GBase-X SFP+	1x 100/1000Base-X SFP	1x 1000Base-X SC	1x 1000Base-X SC
Fiber Maximum Distance	Vary on SFP Module		10km	220/550m
Optic Wavelength	Vary on SFP Module		1310nm	850nm
Max. Optic Launch Power	Vary on SFP Module		-3dBm	-4dBm
Min. Optic Launch Power	Vary on SFP Module		-9.5dBm	-9.5dBm
Max. Input Power	Vary on SFP Module		-3dBm	N/A
Min. Input Power	Vary on SFP Module		-20dBm	-18dBm
Optical Link Budget	Vary on SFP Module		4.9dBm	3dB(62.5/125μm) 4dB(50/125μm)
OAM	N/A	TS-1000 and IEEE 802.3ah Terminal mode supported		
Jumbo Frame	16K	9K		
ESD Protection	6KV DC	N/A		
Max. Power Consumption	3.75W	4.6W		
Input Voltage	5V DC, 2A max.			
Flow Control	Back pressure for half duplex mode IEEE 802.3x pause frame for full duplex mode			
Quality Certification	FCC, CE, RoHS, REACH, RCM, EAC, WEEE			
Operating Temperature	0 to 50℃			
Storage Temperature	-10 to 70℃			
Operating Humidity	5 to 95%, non-condensing			
Storage Humidity	5 to 95%, non-condensing			

Specification

	UMC-1S1T	UMC-1F1T	UMC-1SC1T-SM	UMC-1SC1T-MM
MTBF		＞50,000 Hours @ 25 ℃		
Cable	Twisted-pair: Cat 5/5e/6/6a/7 Ethernet cable Fiber Optic: MM: 50/125 μm or 62.5/125 μm fiber optic cable SM: 9/125 μm fiber optic cable	Twisted-pair: Cat 5/5e/6 Ethernet cable Fiber Optic: MM: 50/125 μm or 62.5/125 μm fiber optic cable SM: 9/125 μm fiber optic cable		
Speed	Twisted-pair: 100Mbps for half/full duplex 1/2.5/5/10G for full duplex Fiber Optic: 10G for full duplex	Twisted-pair: 10/100Mbps for half/full duplex 1000Mbps for full duplex Fiber Optic: 100Mbps/1000Mbps for full duplex		
Standards and Protocols	IEEE 802.3u 100BASE-TX IEEE 802.3ab 1000BASE-T IEEE 802.3bz 2.5G/5GBASE-T IEEE 802.3an 10GBASE-T IEEE 802.3ae 10Gbps Ethernet IEEE 802.3x full-duplex flow control	IEEE 802.3, 10Base-T IEEE 802.3u, 100Base-TX IEEE 802.3ab, 1000Base-T IEEE 802.3z, 1000Base-SX/LX IEEE 802.3x Full-duplex flow control		
Dimensions (Hx Wx D)	1.02"x 2.76"x 3.7" (26x70x94mm)	1.02"x 2.76"x 3.82" (26x70x97mm)		



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