

MMC-1F1T Managed Ethernet Media Converter Datasheet

Flexible and Reliable Network Distance Extension Solution.



Overview

The MMC-1F1T Gigabit Ethernet Media Converter bridges 1000BASE-SX/LX fiber to 10/100/1000Base-T copper networks, enabling fiber extensions up to 550M (Multimode) or 120KM (Single Mode/WDM) via SFP modules. Its integration of Link Fault Pass-through (LFP) technology promotes efficient network maintenance and reduces downtime. With options for desk, wall, or chassis installation, the MMC-1F1T is a versatile solution for ISP networks and small office environments.

It also supports remote management through an intuitive web interface, command line interface (CLI), and SNMP protocol, making it easy to monitor and configure the converter from anywhere.

Benefits

- Auto-Negotiation and Auto-MDI/MDIX on RJ45 Port
- Auto-negotiation of Half-Duplex / Full-Duplex Transfer Mode
- Maximum Transmission Distance Depends on the Inserted Modules
- Advanced Features: LFP (Link Fault Pass Through)
- Support WEB UI/SNMP/Telnet/SSH Management

Key Features

User-friendly Web Management Interface

User-friendly and Centralized Web Management Interface For efficient management, the MMC-1F1T is equipped with a remote Web/SNMP interface. With its built-in Web-based management, MMC-1F1T acts as an easy-to-use, platform-independent management and configuration facility. The MMC-1F1T also supports standard Simple Network Management Protocol (SNMP) and can be managed via any standard-based management software.

OAM Management

OAM Management TS-1000/802.3ah OAM protocol (operation, administration, and maintenance) supported enables remote OAM compliant device to be managed and monitored by the MMC-1F1T .

Remotely Manage Solution

Universal Network Management System and Cloud Viewer App support IT staff to remotely manage all network devices and monitor the MMC-1F1T operation statuses. Thus, they're designed for both the enterprises and industries where deployments of the MMC-1F1T can be as remote as possible, without having to go to the actual location once a bug or faulty condition is found.

Management Features

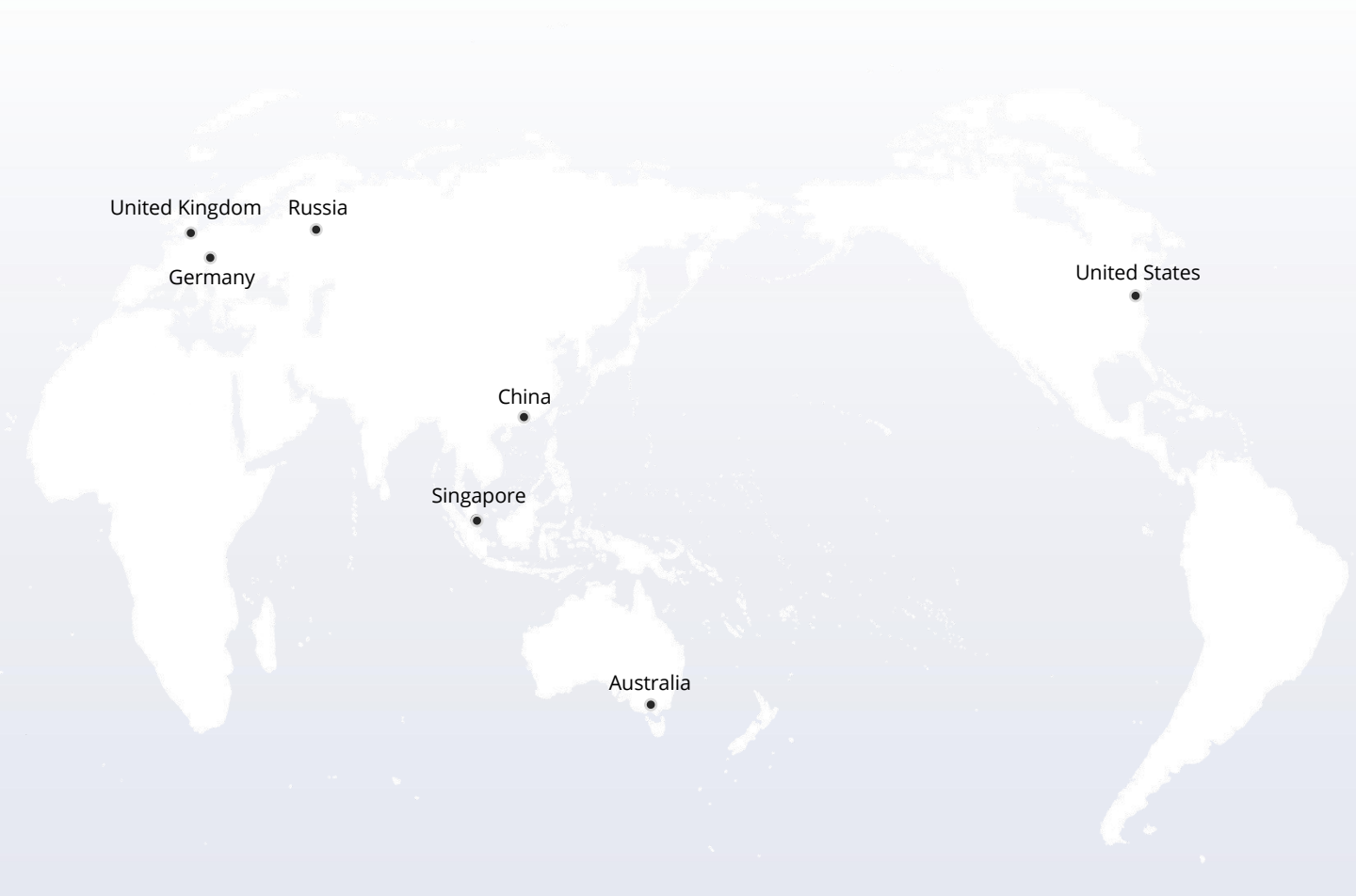
- IPv4 and IPv6 dual stack management
- Management Interface
- Web HTTP management
- Telnet Command Line Interface
- SNMP v1, v2c monitoring
- SSHv2, TLSv1.2 and SNMP v3 secure access
- System Maintenance
- Firmware upload/download via HTTP
- Reset button for system reboot or reset to factory default
- Network Time Protocol (NTP)
- SNMP Management
- SNMP trap for interface link up and link down notification
- Four RMON groups (history, statistics, alarms and events)
- Network Diagnostic– SFP-DDM (Digital Diagnostic Monitor)
- Syslog remote alarm• Local system Log
- Smart Discovery Utility for deploy management
- Remote Management
- NMS Controller and CloudViewer for deployment management

Specification

	MMC-1F1T
Copper Interface	1x 10/100/1000Base-T RJ45
Fiber Optic Interface	1x 100/1000Base-X SFP
Reset Button	< 10 sec.: System reboot > 10 sec.: Factory default
ESD Protection	6KV DC
Input Voltage	5V DC, 2A max.
Max. Power Consumption	3.4W
Heat Output	11.6 BTU
Jumbo Frame	16K
Cable	Twisted-pair: Cat 5 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: 10/100Mbps for half/full duplex 1000Mbps for full duplex Fiber Optic: 100/1000Mbps for full duplex
Standards and Protocols	IEEE 802.3, 10BASE-T IEEE 802.3u, 100BASE-TX/FX IEEE 802.3ab, 1000BASE-T IEEE 802.3z, 1000BASE-SX/LX IEEE 802.3x full-duplex flow control IEEE 802.1p Class of Service IEEE 802.1Q VLAN tagging IEEE 802.1ad Q-in-Q VLAN stacking IEEE 802.1ab LLDP IEEE 802.3ah OAM RFC 768 UDP RFC 793 TFTP RFC 791 IP RFC 792 ICMP RFC 2068 HTTP

Specification

	MMC-1F1T
LED Indicator	PWR, (Green) TP LINK/ACT, 1000 (Green) Fiber LINK/ACT (Green)
Queue Scheduling	Store and Forward
Fabric	4Gbps
Throughput (packet per second)	2.98Mpps@64bytes
Address Table	1K entries, automatic source address learning and aging
Flow Control	Back pressure for half duplex IEEE 802.3x pause frame for full duplex
Port Configuration	Port disable/enable Auto-negotiation 10/100/1000Mbps full and half duplex mode selection Flow control disable/enable
Port Status	Display each port's speed duplex mode, link status, flow control status, auto negotiation status
VLAN	IEEE 802.1Q tag-based VLAN IEEE 802.1ad Q-in-Q tunneling Up to 16 VLAN groups, out of 4094 VLAN IDs Management VLAN
Bandwidth Control	Per port bandwidth control Ingress: 1~1000,000Kbps Egress: 1~1000,000Kbps
QoS	Traffic classification based, strict priority and WRR 8-level priority for switching Traffic classification:- 802.1p priority - IP DSCP - IP Address
Operating Temperature	0 to 50°C
Storage Temperature	-10 to 70°C
Operating Humidity	5 to 90%, non-condensing
Storage Humidity	5 to 95%, non-condensing
Weight	201g
Dimensions (Hx Wx D)	1.02"x2.76"x3.7"(26x70x94mm)



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