

## Fiber Optic Media Converter 10 Gigabits Ethernet

#### Network Equipment Series

Model MC10G



### **Product Description**

The MC10G Fiber Optic Media Converter is designed to operate in high temperature NEMA environment with 1 x 10 Gbs TX copper port and 1 x 10G SFP Fiber Optic Port. The converter mediates between a 10G Base-TX segment and a 10G Base-FX segment. It is primarily designed for large, higher speed/bandwidth demanding workgroups that require expansion of the Ethernet network. It can extend the 10G TX Ethernet up to 20Km distances via the SFP 10 Gigabit Ethernet Fiber-optic module. It is high-performance, cost effective and flexible solutions for a wide range of applications in the field of 5G communication network or LAN campus networks.

The MC10G offers an easy-to-use and configuration facility, via the WEB interface, it can be programmed for basic management functions such as per port speed duplex settings, Port Trunking, VLAN, Port Mirroring, network security authentication and misc configurations. Additionally, the firmware includes advanced features such as IGMP snooping, QoS (Quality of Service), broadcast storm and bandwidth control, to enhance bandwidth utilization. The extended temperature capability for meeting NEMA specifications satisfies very critical applications requiring high quality data transmission performance with high reliability. Applications include Telecom 5G Networks, ITS Intelligent Traffic System, Metro Operation, HDTV Broadcasting System, IP cameras Surveillance, Homeland Security, Utility Management, Premise Networks, Military Hardened applications or anything requiring high speed Ethernet Network performance.

#### Features

- Complies with IEEE 802.3an 10G Base-T, IEEE 802.3ae 10G Base-SR,LR,ER, ZR
- 1 x 10G Fiber Optic SFP Module
- 1 x 10G TX Copper RJ45
- Support Jumbo frame supports Transport, Diagnostics, Monitoring and Network Performance Measuring
- Supports IEEE 802.1Q VLAN Tagging and Stacking, QoS Level Traffic Shaping and Policing
- E-Line, E-LAN and E-Access Supports
- NEMA Temperature Compliance

### Applications

- ITS Traffic Applications
- SCADA Networks
- Metro Networks
- Gas & Oil Fields Monitoring Applications
- Railroad Networks
- Military Applications
- Data Acquisition Applications

#### **Ordering Information**

Model	Descriptions	
MC10GLC03	Fiber Optic 10 GB Media Converter, LC SM 50Km, +5 VDC	



# Technical Specifications

Model MC10G

#### Network TV Equipment Series

System:			
Error Rate	1 in 10 <sup>12</sup> or Better		
Network Standard	IEEE 802.3an 10G BASE-T IEEE 802.3ae 10G BASE-FX IEEE 802.3x Flow Control IEEE 802.3ad Port trunk with LACP IEEE 802.3af PoE PSE IEEE 802.1Q VLAN Tagging		
Indicators	PWR, 10G, Link, TX, ACT, SD		
Ports	1 x 10G Base-T port 1 x 10G Base- SFP port		
Frame Flow Control	Full Duplex Mode		
Frame size	16K Bytes		
Jumbo Frame	9000 Bytes		
Layer 2 Management	Store-and Forward Remote Monitoring (RMON) Far-end Fault Indication (FEFI) Link Fault Pass Through (LFP) Auto Recovery Remote Management and Set Up Manual IP Address Setting / DHCP Loopback, Broadcast, Multicast, Unicast storm control Speed Duplex Mode Configuration Bandwidth Control on TP/FX		
Physical:			
Dimension	6" x 5" x 1.5"		
Power	+5 VDC @ 3 Amp		

#### Fiber Interface: Port SFP Module Data Rate 10 Gbps Connector LC Distances 2KM@850MM, 10KM@1310MM 20KM@1310SM, 80KM@1550SM **TX Interface:** TX Port 1 x 10,000 Base-TX Auto-Negotiation MDI/MDIX Data Rate 10 Gbps Connector RJ45 **Network Management :** Interface Web Browser, SNMPv1, v2c Monitor Port enable, Auto-Negotiation, Full Port Configuration and Half Duplex mode, Flow Control Enable, Bandwidth Control VLAN 16 IEEE 802.1Q VLAN / Q-in-Q VLAN TS-1000 OAM IEEE 802.3ah OAM / Loop Back Test Link Aggregation Supports IEEE 802.3ad LACP QoS 802.1p Priority, DSCP field in IP IGMP (v1/v2) Snooping, up to 64 **IGMP** Snooping Multicast groups RFC-1213 MIB-2, RFC-1573 MIB SNMP MIBs RFC-2819 RMON MIB (Group 1) **Environment:** -34° C to +74°C Operating $-40^{\circ}$ C to + 95°C Storage Humidity 98% Non-Condensing

**Control Center** 



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