

EGM102, 10/100/1000TX to 1000FX Micro Switch / Media Converter



#### Overview

The EGM102 is a layer 2 Fast Ethernet Micro Switch that converts 10BaseT or 100BaseTX or 1000BaseTX to 1000BaseFX, it operates at full wire speed without collisions or discards. The RJ45 port will auto negotiate to 10Mbps, 100Mbps, or 1000 Mbps, full or half duplex. Extremely small size steel case with integrated mounting flanges makes it very attractive for all kinds of installations. The EGM102 is a layer 2 switch that allows you to add fiber segments to an existing copper network. These fiber segments can be up to 2 kilometers with multi-mode, 50 kilometers with single-mode and 100 kilometers with long distance single mode. Fiber segments eliminate electro-magnetic interference and offer protection from lightning and electronic eavesdropping.

#### **Features**

- Converts 10/100/1000TX to 1000FX and vice-versa.
- Allow for the introduction of a fiber segment to copper network.
- · Greatly increase segment length, eliminate electro-magnetic interference, and offers protection from lightning.
- Multimode configuration standard, the optional single mode can increase fiber segment lengths from 0.5 km to 10 km.
- MDI/MDIX.
- Compact rugged steel enclosure.
- Auto Negotiation 10/100/1000TX
- Designed & Manufactured in the USA.

### Description

EMB11, 10/100TX to 100FX media converter, is designed to meet the need to integrate the Fast Ethernet performance with the benefits of fiber segments. EMB11 complies with IEEE 802.3u standard. EMB11 generates fast link pulses to allow the link partner to auto-negotiate to full duplex on the copper segment. A complement of five LEDs display power for the unit plus link and receive on each segment. A wall mount 12 VDC power supply is supplied with the unit and is available for 110-240 VAC.

## **EGM102 TECHNICAL SPECIFICATIONS**

Network Standards	Ethernet IEEE 802.3	
Speed	10 Mbps 100 Mbps 1000 Mbps	Half or Full Duplex Auto Negotiation on copper port. 1000FX full duplex.
Power Requirement for EGM102-ST-5V	Input Voltage; Output Voltage	110/240 Vac 50/60 Hz. 12 Vdc @1 Amp.
LEDs	Total 8	1 for power, The 10/100/1000 port has 2, 1000TX speed and Link/Activity The 1000FX port GigE speed and Link/Activity.
Connectors	Total 3	RJ45 for 10/100/1000TX Port. SC or ST for GigE fiber. DC Power jack: 11 mm x 5.5 mm x 2.5 mm, center positive.
MAC addresses	Look up engine supports 1 K	Automatic leaning, address aging & address migration
Bandwidth	16 Chas mamons	Mire speed resention 9 transmission
Broadcast storm prot	16 Gbps memory	Wire speed reception & transmission
Weight	2.2 lbs. (1 kg)	including power supply
Dimensions EGM102-ST-5V	4.5" x 2.1" x 1.0"	(11.6 cm x 5.4 cm x 2.6 cm)
Environmental	Operating Temperature Storage Temperature Relative Humidity	32 to 122F (0 to 50 C) -4 to 140F (-20 to 60 C) 5% to 90% (non-condensing)
Cabling	UTP Category 5e, maximum cable distance 100 m. Fiber multi-mode, maximum cable distance 0.5 km.	
Regulatory Approvals	EMI FCC Class A & CE.	
Warranty	5 years	

# Mechanical Spec:

