

# PoE and PoE+ Giga-MiniMc

10/100/1000 Mbps PoE & PoE+ Switching Media Converter

The PoE and PoE+ Giga-MiniMc is targeted for Gigabit and 100 Mbps applications that require power over Ethernet to locations where PoE is needed to power the unit.

# **Features and Benefits**

#### **Flexible Solution**

- Connects 10/100/1000 Mbps copper to 100/1000 Mbps fiber SFP or 10/100/1000 Mbps copper SFP
- Supports Jumbo Frames (up to 10240 bytes)
- Rugged stand-alone metal enclosure with compact external power supply
- Multiple mounting options (Desktop, DIN Rail or Wall-mount)
- For multimode, single-mode, single-strand and CWDM fiber
- Features configurable PoE Reset on Fiber LOS
- Packet prioritization

#### **Power Options:**

- Supports IEEE 802.3af PoE (15.4W) and IEEE 802.3at PoE+ (25.5W) standards
- 4-terminal DC power with a pair of input terminals and a pair of output terminals for cascading power on DIN installation
- External AC power supply

## **Plug-and-Play Operation**

- User-friendly Auto Negotiation technology
- Auto-Cross MDI/MDIX offered on fixed copper ports

## **SFP Support**

- Auto negotiate speed and flow control for 10/100/1000 copper SFPs with SGMII
- Supports fixed speed 1 Gbps full-duplex copper SFPs
- Auto detect for 100 or 1000 optical SFPs



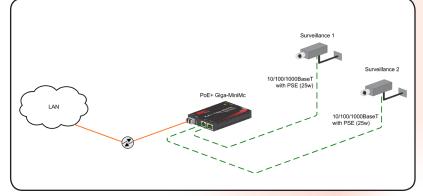
The PoE and PoE+Giga-MiniMc are low-cost, compact, multi-port media converters that support both PoE and PoE+ standards. Utilizing their flexibility and compact size, interior private network applications can further benefit from the ever-expanding versatility of the MiniMc product line.

Featuring 2 10/100/1000Base-T copper UTP ports and one SFP uplink port that supports either a copper or fiber SFP, the PoE and PoE+ Giga-MiniMc are Power Source Equipment (PSE) devices. The PoE+ GigaMiniMc is capable of powering up to two Powered Devices (PD) over standard CAT5 cable or better, whereas the PoE GigaMiniMc can power one PD device via a copper port while delivering data over the other copper port. The PoE+ GigaMiniMc is able to power high-power devices such as touch panels, PTZ (pan-tilt-zoom) IP surveillance cameras, and RFID readers that require more power than the typical 15.4 W provided by standard PSE devices such as the PoE GigaMiniMc.

The PoE and PoE+ Giga-MiniMc models are fully compatible with the IEEE 802.3af/at standards to ensure a seamless intergation into your network. Enhanced features include store-and-forward, Autocross and PoE reset on fiber loss of signal. PoE reset is an advanced function that, when enabled, will force the PSE output power to reset when LINK state is lost on the SFP port.

# **Application Example**

In the following example, the PoE+ Giga-MiniMc is shown powering two separate pan/tilt/zoom (PTZ) IP surveillance cameras at a remote location. The PoE+ Giga-MiniMc is powered via AC or 48 VDC, while it can be mounted up to 100 m from the cameras that are being driven via PoE.



# **Technical Specifications**

- IEEE 802.3 10Base-T twisted pair
- IEEE 802.3u 100Base-TX twisted pair
- IEEE 802.3ab 1000Base-T twisted pair
- IEEE 802.3z 1000Base-LX or SX fiber
- IEEE 802.3af Power over Ethernet
- · IEEE 802.3at Power over Ethernet Plus
- IEEE 802.3u Auto-Negotiation
- RFC-2474
- RFC-2475 DiffServ QoS
- Extreme temperature range (DC configuration)
- Plug-and-play operation
- Accepts RJ-45, SC and SFP connectors
- 50/125μm or 62.5/125μm multi-mode fiber
- 9/125µm single-mode fiber
- Single-strand fiber and CWDM models
- Country-specific, high-reliability power adapter
- FX and TX Auto Negotiation
- AutoCross for MDI/MDIX
- MTU: Supports Jumbo Frames up to 10240 bytes
- Supports DIN Rail mounting (DIN clips sold separately)

### **Regulatory Approvals:**

- FCC Class A
- UL/cUL, CSA, CE

#### **Dimensions:**

0.80" H x 3.645" W x 3.82" D (2.032 cm x 9.258 cm x 9.7028 cm)

#### **AC Adapter:**

PoE+ Giga-MiniMc

Input: 100 to 240  $\pm 10\%$  VAC, 50/60H, 2A \*

Output: 52 VDC, 2.31A

PoE Giga-MiniMc

Input: 100 to 240 ±10% VAC, 50/60H, 0.7A \*

Output: 48 VDC, 0.62A

\* Maximum input power in Watts is calculated by multiplying the input amps by the lowest input voltage.

#### **DC Input Voltage:**

PoE+ Giga-MiniMc

51 to 57 VDC on DC terminal block

51 to 57 VDC on DC jack

PoE Giga-MiniMc

45 to 57 VDC on DC terminal block

48 VDC on DC jack

#### **Operating Temperature:**

 $+32^{\circ}$  F to  $+158^{\circ}$  F (0° C to  $+70^{\circ}$  C) DC terminal Block; 5% to 95% (non-condensing)

+32° F to +122° F (0° C to +50° C) w/ AC Adapter;

5% to 95% (non-condensing)

#### **Storage Temperature:**

-40° to +185° F (-40° to +85° C)

# **Fiber Optics Specifications**

For each product listed below in the Ordering Information section, the DISTANCE represents an approximate fiber distance based on industry-standard fiber attenuation specifications. Actual distances will vary for each installation. For complete power budgets and information on calculating specific distances, visit www.imcnetworks.com/go/fcs or contact IMC Networks Fiber Consulting Services at 949-465-3000.

## **Ordering Information**

PART #	DESCRIPTION	DISTANCE		
PoE+ Giga-MiniMc				
857-10911	PoE+ Giga-MiniMc, 2TX/SFP §	Varies		
857-10912	PoE+ Giga-MiniMc, 2TX/SX-MM850-SC	220/550 m		
857-10913	PoE+ Giga-MiniMc, 2TX/LX-MM1300-SC	2 km		
857-10914	PoE+ Giga-MiniMc, 2TX/LX-SM1310-SC	15 km		
857-10915	PoE+ Giga-MiniMc, 2TX/LX-SM1310/PLUS-SC	40 km		
857-10916	PoE+ Giga-MiniMc, 2TX/LX-SM1550/LONG-SC	80 km		
857-10917	PoE+ Giga-MiniMc, 2TX/LX-SM1550/XLONG-SC	100 km		
PoE+ Giga-MiniMc				
857-10920	PoE+ Giga-MiniMc, 2TX/SSLX-SM1310-SC (1550 rcv)	15 km		
857-10921	PoE+ Giga-MiniMc, 2TX/SSLX-SM1550-SC (1310 rcv)	15 km		
857-10922	PoE+ Giga-MiniMc, 2TX/SSBX-SM1310-SC (1490 rcv)	10 km		
857-10923	PoE+ Giga-MiniMc, 2TX/SSBX-SM1490-SC (1310 rcv)	10 km		
857-10924	PoE+ Giga-MiniMc, 2TX/SSLX-SM1310/PLUS-SC (1550 rcv)	40 km		
857-10925	PoE+ Giga-MiniMc, 2TX/SSLX-SM1550/PLUS-SC (1310 rcv)	40 km		
857-10926	PoE+ Giga-MiniMc, 2TX/SSBX-SM1310/PLUS-SC (1490 rcv)	30 km		
857-10927	PoE+ Giga-MiniMc, 2TX/SSBX-SM1490/PLUS-SC (1310 rcv)	30 km		
857-10928	PoE+ Giga-MiniMc, 2TX/SSLX-SM1490/LONG-SC (1550 rcv)	70 km		
857-10929	PoE+ Giga-MiniMc, 2TX/SSLX-SM1550/LONG-SC (1490 rcv)	70 km		

SFP modules are sold separately. For more information on compatible IMC Networks SFPs, go to: www.imcnetworks.com/Products/product.cfm?family=32

PART#	DESCRIPTION	DISTANCE	
PoE Giga-MiniMc			
857-10811	PoE Giga-MiniMc, 2TX/SFP §	Varies	
857-10812	PoE Giga-MiniMc, 2TX/SX-MM850-SC	220/550 m	
857-10813	PoE Giga-MiniMc, 2TX/LX-MM1300-SC	2 km	
857-10814	PoE Giga-MiniMc, 2TX/LX-SM1310-SC	15 km	
857-10815	PoE Giga-MiniMc, 2TX/LX-SM1310/PLUS-SC	40 km	
857-10816	PoE Giga-MiniMc, 2TX/LX-SM1550/LONG-SC	80 km	
857-10817	PoE Giga-MiniMc, 2TX/LX-SM1550/XLONG-SC	100 km	
PoE Giga-MiniMc			
857-10820	PoE Giga-MiniMc, 2TX/SSLX-SM1310-SC (1550 rcv)	15 km	
857-10821	PoE Giga-MiniMc, 2TX/SSLX-SM1550-SC (1310 rcv)	15 km	
857-10822	PoE Giga-MiniMc, 2TX/SSBX-SM1310-SC (1490 rcv)	10 km	
857-10823	PoE Giga-MiniMc, 2TX/SSBX-SM1490-SC (1310 rcv)	10 km	
857-10824	PoE Giga-MiniMc, 2TX/SSLX-SM1310/PLUS-SC (1550 rcv)	40 km	
857-10825	PoE Giga-MiniMc, 2TX/SSLX-SM1550/PLUS-SC (1310 rcv)	40 km	
857-10826	PoE Giga-MiniMc, 2TX/SSBX-SM1310/PLUS-SC (1490 rcv)	30 km	
857-10827	PoE Giga-MiniMc, 2TX/SSBX-SM1490/PLUS-SC (1310 rcv)	30 km	
857-10828	PoE Giga-MiniMc, 2TX/SSLX-SM1490/LONG-SC (1550 rcv)	70 km	
857-10829	PoE Giga-MiniMc, 2TX/SSLX-SM1550/LONG-SC (1490 rcv)	70 km	

PART NUMBER	DESCRIPTION		
PoE / PoE+ Giga MiniMc Accessories			
806-39800	PoE Power Adapter for PoE Giga-MiniMc		
806-39900	PoE+ Power Adapter for PoE+ Giga-MiniMc		
806-39910	PoE+ Isolated Power Adapter		
806-39105	DIN Rail Clip		











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