

# IE-MiniMc/IE-Giga-MiniMc

Industrial Grade 10/100, Gigabit Switching Miniature Media Converters

The IE-MiniMc and IE-Giga-MiniMc Series are Industrial Equipment (IE) versions of the popular MiniMc Series, offering a range of transmission speeds, extended temperature, multiple powering options, DIN-rail mounting.

## Features and Benefits

### The most cost-effective fiber converter available

- Low cost and feature rich
- Value add industrial grade extended temperature performance

### Versatile Solution

- Standalone unit with small, rugged metal enclosure with compact, external power supply
- Available in 10/100 Mbps switching (IE-MiniMc), Gigabit Switching (IE-Giga-MiniMc) and protocol independent SFP (IE-MiniMc SFP/SFP) versions
- Includes DIN clips for mounting (parallel or perpendicular) on DIN rail
- Available for a variety of fiber types and connectors, including single-strand fiber

### More power options than other converters, for a variety of applications

- Includes country-specific AC power adapter
- Terminal DC power block with extended voltage range (7 to 50 VDC)
- Installs in the IE-PowerTray/18
- Power Over Ethernet (IEEE 802.3af standard) (10/100 versions only)
- Powering options can be combined for redundancy

### Plug-and-Play Operation

- User-friendly Auto-Negotiation technology
- Auto-Cross feature for twisted pair connection on all converters

### High quality guaranteed

- Made in America with a comprehensive 6-year warranty (including power adapter)



Measuring less than 3.5 inches deep and 2 inches wide, the IE-MiniMc and IE-Giga-MiniMc Series converters are the industry's smallest copper-to-fiber or SFP/SFP media converters, with both data connections on the same side. The converters are a fraction of the cost of other industrial grade alternatives. The products provide the ease and convenience of plug-and-play operation (Auto-Negotiation and Auto-Cross), and multiple power options, including the IEEE 802.3af Power Over Ethernet (PoE) (10/100 IE-MiniMc versions only), in an industrial grade configuration. The series features a variety of 10/100 and Gigabit versions.

### All versions include:

- Extended operating temperature of -35 to 70° C
- Auto-Cross automatic selection between crossover and straight-through cable
- Status LEDs
- DIN clips, allowing installation on a DIN-rail

### IE-MiniMc includes:

- One 100 Mbps Full-Duplex fiber port
- One 10/100 Base-TX twisted-pair port that auto-senses the connected device's rate and duplex mode (Half-Duplex/Full-Duplex)
- Twisted pair port also functions as a Powered Device port, supporting Power Over Ethernet (PoE)

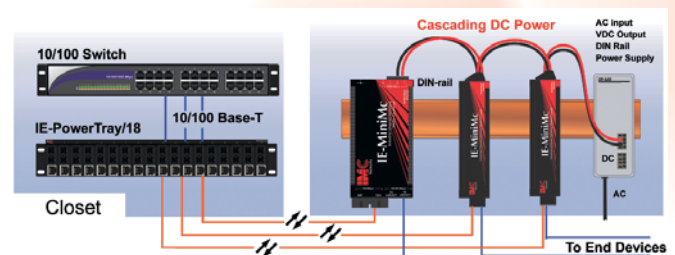
### IE-Giga-MiniMc includes:

- One 1000Base-SX or 1000Base-LX fiber port operating at Full-Duplex.
- One 10/100/1000 Mbps twisted-pair port that auto-senses the connected device's speed and duplex mode (Half-Duplex/Full-Duplex)\*

\*At gigabit speeds, twisted-pair port operates at Full-Duplex only.

## Application Example

The IE-MiniMc ships from the factory with DIN clips, allowing installation on a DIN-rail. When installing multiple IE-MiniMc units on a DIN-rail, power from the DC input source can be daisy-chained from one IE-MiniMc DC terminal to another.



# Technical Specifications

## IE-MiniMc Only

- IEEE 802.3 10Base-T twisted pair
- IEEE 802.3u 100Base-TX twisted pair
- IEEE 802.3u 100Base-FX fiber
- IEEE 802.3af Power Over Ethernet

## IE-Giga-MiniMc Only

- 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



## All Versions

- Support over-sized packets up to 1916 bytes
- Plug-and-play operation
- RJ-45, and ST or SC ports available
- 50/125µm or 62.5/125µm multi-mode fiber
- 9/125µm single-mode fiber
- Available with single-strand fiber support
- Includes terminal DC power block
- Country-specific, high-reliability power adapter
- Auto-Negotiation
- Auto-Cross for MDI-II/MDI-X
- Layer 2 packet switching, store and forward (forwarding rate: 14,880 pps for 10 Mbps, 148,000 pps for 100 Mbps, 1,480,000 Mbps for 1000 Mbps)
- Broadcast storm protection
- Status LEDs
- DIN clips for DIN-35 rail

### Dimensions:

0.83"H x 1.80"W x 3.35"D (2.11 x 4.57 x 8.51 cm)

### Humidity:

5 to 95% (non-condensing)

### Power Rating:

7 - 50V DC, 1A-0.1A

### Operating Temperature:

-31° to 158° F (-35° to 70° C) without AC wall adapter  
32° to 122° F (0° to 50° C) with AC wall adapter

### Storage Temperature:

-49° to 185° F (-45° to 85° C)

## IE-PowerTray/18

- 1.5U high rack mountable enclosure for powering up to 18 MiniMcs
- AC or DC versions available

### Power Information

AC Input Load: 100-240V AC, 50/60Hz, 1.5A  
DC Input Load: -48V DC or -48/60V DC, 2A

### Regulatory Approvals:

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

### Dimensions

2.30"H x 16.97"W x 9.25"D (5.80 x 43.10 x 23.5 cm)

### Shipping Weight

10 lbs (4.5 kg)

### Operating Temperature

32° to 122°F (0° to +50°C)  
5% to 90% (non-condensing),  
0 - 10,000 ft. altitude

### Storage Temperature

-4° to +158°F (-20° to +70°C)  
5 to 90% (non-condensing)

### Regulatory Approvals:

- FCC Class B
- UL/cUL, CE

# Fiber Optics Specifications

For each product listed below in the Ordering Information section, 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](http://www.imcnetworks.com/go/fcs) or contact IMC Networks Fiber Consulting Services at 949-465-3000.

## Ordering Information

PART NUMBER	DESCRIPTION	DISTANCE
<b>IE-MiniMc 10/100</b>		
855-19722	IE-MiniMc, TP-TX/FX-MM1300-ST	2 Km
855-19723	IE-MiniMc, TP-TX/FX-MM1300-SC	2 Km
855-19724	IE-MiniMc, TP-TX/FX-SM1310/PLUS-ST	40 Km
855-19725	IE-MiniMc, TP-TX/FX-SM1310/PLUS-SC	40 Km
855-19726	IE-MiniMc, TP-TX/FX-SM1310/LONG-ST	80 Km
855-19727	IE-MiniMc, TP-TX/FX-SM1310/LONG-SC	80 Km
<b>IE-MiniMc 10/100 Single Strand Fiber *</b>		
855-19750	IE-MiniMc, TP-TX/SSFx-MM1310-SC	2 Km
855-19751	IE-MiniMc, TP-TX/SSFx-MM1550-SC	2 Km
855-19752	IE-MiniMc, TP-TX/SSFx-SM1310-SC	20 Km
855-19753	IE-MiniMc, TP-TX/SSFx-SM1550-SC	20 Km
855-19754	IE-MiniMc, TP-TX/SSFx-SM1310/PLUS-SC	40 Km
855-19755	IE-MiniMc, TP-TX/SSFx-SM1550/PLUS-SC	40 Km
855-19756	IE-MiniMc, TP-TX/SSFx-SM1310/LONG-SC	60 Km
855-19757	IE-MiniMc, TP-TX/SSFx-SM1550/LONG-SC	60 Km

PART NUMBER	DESCRIPTION	DISTANCE
<b>IE-Giga-MiniMc 10/100/1000</b>		
856-18830	IE-Giga-MiniMc, TX/SX-MM850-SC	300 m
856-18831	IE-Giga-MiniMc, TX/LX-SM1310-SC	15 Km
856-18832	IE-Giga-MiniMc, TX/LX-SM1310/PLUS-SC	40 Km
856-18833	IE-Giga-MiniMc, TX/LX-SM1550/LONG-SC	70 Km
856-18834	IE-Giga-MiniMc, TX/LX-SM1550/XLONG-SC	120 Km
<b>IE-Giga-MiniMc 10/100/1000 Single Strand Fiber *</b>		
856-18835	IE-Giga-MiniMc, TX/SSLX-SM1310 SC	10 Km
856-18836	IE-Giga-MiniMc, TX/SSLX-SM1550 SC	10 Km
856-18837	IE-Giga-MiniMc, TX/SSLX-SM1310/PLUS-SC	40 Km
856-18838	IE-Giga-MiniMc, TX/SSLX-SM1550/PLUS-SC	40 Km
856-18839	IE-Giga-MiniMc, TX/SSLX-SM1490/LONG-SC	60 Km
856-18840	IE-Giga-MiniMc, TX/SSLX-SM1550/LONG-SC	60 Km

PART NUMBER	DESCRIPTION
<b>IE-PowerTray/18</b>	
850-13086	IE-PowerTray/18-AC (1.5U high, Rackmountable Enclosure)
850-32088	IE-PowerTray/18-DC (1.5U high, Rackmountable Enclosure)
<b>IE-MiniMc Accessories</b>	
806-39623	AC Power Adapter for MiniMc products (10 watt, 0° C to 50° C)
806-00322-00	USA Power Adapter Clip
806-00322-01	UK Power Adapter Clip
806-00322-02	Europe Power Adapter Clip
806-00322-03	Australia/NZ Power Adapter Clip

\* These products have single-strand fiber technology. Deploy in pairs, or connect to another compatible IMC Networks single-strand fiber product. For more information go to: [www.imcnetworks.com/products/SSFx.cfm](http://www.imcnetworks.com/products/SSFx.cfm)



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