

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

### Features and Benefits

**The most cost-effective fiber converter available**

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

#### Versatile Solution

- Stand-alone unit with small, rugged metal enclosure with compact, external power supply
- Also available in Gigabit Switching models (IE-Giga-MiniMc)<sup>1</sup>
- -48 VDC terminal for Telco applications<sup>2</sup>
- 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 (non-Telco) with extended voltage range (7 to 50 VDC)
- Installs in the IE-PowerTray/18-AC
- IEEE 802.3af Power Over Ethernet
- Powering options can be combined for AC/DC redundancy
- USB power

#### Plug-and-Play Operation

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

#### “Industrial Equipment” (IE) features for operation in difficult environments

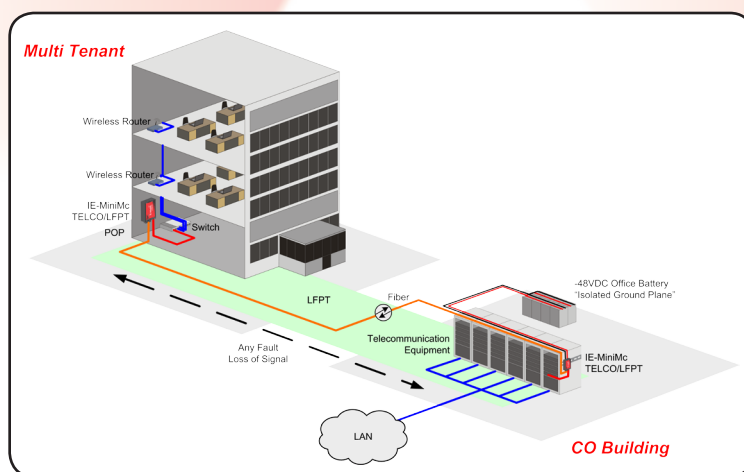
- Extended temperature functionality, up to -25° to +85° C
- DIN Rail mountable (DIN clips sold separately)



Measuring less than 3.5 inches deep and 2 inches wide, the IE-MiniMc and IE-Giga-MiniMc Series converters are some of the industry’s smallest copper-to-fiber media converters, with both data connections on the same side. The IE-MiniMc family of media converters are a fraction of the cost of other industrial grade alternatives. These products provide the ease and convenience of plug-and-play operation with features including Auto Negotiation and Auto-Cross.

Advanced features such as Link Fault Pass-Through (LFPT) assist operators in identifying breaks in the network when using unmanaged network hardware.

Multiple powering options include Power over Ethernet (PoE/PD), -48 VDC for Telco, AC wall adapter and USB which offer unsurpassed flexibility for a variety of installations.



### Application Example

Here we see one IE-MiniMc TELCO/LFPT installed at a Telco (powered by a -48 VDC office battery) and one installed at an MTU. The LFPT function assists in identifying a break in the network if one were to occur.

<sup>1</sup> For more information, visit the IE-GigaMiniMc page at <http://www.imcnetworks.com/Products/product.cfm?family=11>

<sup>2</sup> For models with Telco Power with Link Fault Pass-Through

MEDIA CONVERSION

# Technical Specifications

- 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
- FCC Class A (using DC terminal or PoE power)
- FCC Class B (using any DC jack, optional)
- Supports jumbo packets up to 1916 bytes
- Plug-and-play operation
- RJ-45 and ST or SC ports available (ST connectors not offered for Gigabit speeds)
- 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/MDIX
- Layer 2 packet switching, store and forward (forwarding rate: 14,881 pps for 10 Mbps, 148,100 pps for 100 Mbps, 1,481,000 Mbps for 1,000 Mbps)

## Regulatory Approvals:

- UL/cUL, CE, CSA

## 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)

## Input Specifications:

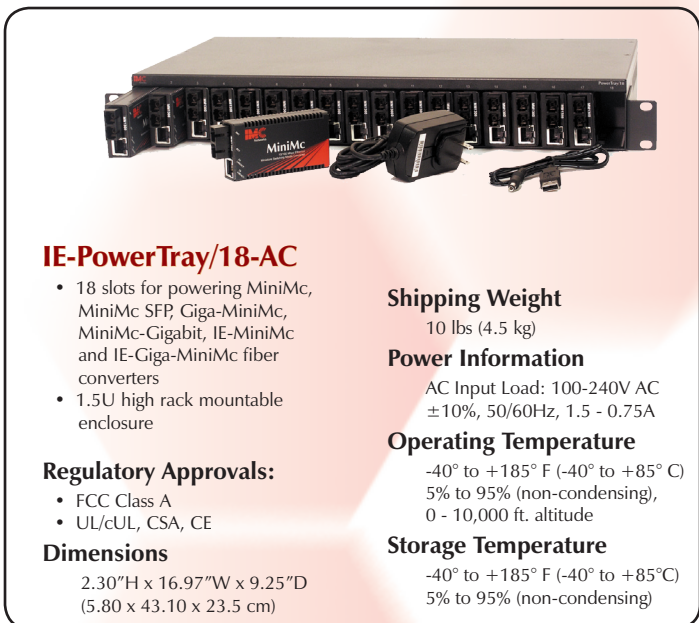
DC Terminal: 7 - 50 VDC, 1A - 0.1A  
Barrel Connector: 5 VDC  
DC Terminal (Telco): 12 to 48 VDC  
Barrel Connector (Telco): 5 to 24 VDC  
PoE: Maximum supply voltage is 50V

## Operating Temperature:

-13° F to 185° F (-25° C to +85° C)  
using DC or PoE (PD) power  
+14° F to +122° F (-10° C to +50° C)  
with AC wall adapter

## Storage Temperature:

-31° F to +167° F (-35° C to +75° C)



## IE-PowerTray/18-AC

- 18 slots for powering MiniMc, MiniMc SFP, Giga-MiniMc, MiniMc-Gigabit, IE-MiniMc and IE-Giga-MiniMc fiber converters
- 1.5U high rack mountable enclosure

## 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)

## Power Information

AC Input Load: 100-240V AC  
±10%, 50/60Hz, 1.5 - 0.75A

## Operating Temperature

-40° to +185° F (-40° to +85° C)  
5% to 95% (non-condensing),  
0 - 10,000 ft. altitude

## Storage Temperature

-40° to +185° F (-40° to +85° C)  
5% to 95% (non-condensing)

# 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>		
855-19720	IE-MiniMc, TP-TX/FX-MM850-ST	2 km
855-19721	IE-MiniMc, TP-TX/FX-MM850-SC	2 km
855-19722	IE-MiniMc, TP-TX/FX-MM1300-ST	5 km
855-19723	IE-MiniMc, TP-TX/FX-MM1300-SC	5 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
855-19730	IE-MiniMc, TP-TX/FX-SM1550/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

\* Modular versions without AC adapter, change the two Part Numbers after the 8 to 54. (i.e. 855-19724 becomes 854-19724)

\*\* 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)

PART NUMBER	DESCRIPTION
<b>IE-PowerTray/18-AC <sup>1</sup></b>	
850-13086	IE-PowerTray/18-AC (1.5U high, Rackmountable Enclosure)

<sup>1</sup> Modules compatible with the IE-PowerTray/18-AC include MiniMc, MiniMc SFP, MiniMc-Gigabit, Giga-MiniMc, IE-MiniMc, IE-MiniMc/Telco-LFPT, IE-MiniMc/LFPT, IE-Giga-MiniMc and IE-ModeConverter SFP/SFP. For more information, go to: [www.imcnetworks.com/Products/ExternalPowerSupply.cfm](http://www.imcnetworks.com/Products/ExternalPowerSupply.cfm)



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PART NUMBER	DESCRIPTION	DISTANCE
<b>IE-MiniMc/Telco-LFPT * §</b>		
855-19202 <sup>1</sup>	IE-MiniMc/Telco-LFPT, TP-TX/FX-MM850-SC	2 km
855-19204	IE-MiniMc/Telco-LFPT, TP-TX/FX-MM1300-SC	5 km
855-19210	IE-MiniMc/Telco-LFPT, TP-TX/FX-SM1310/PLUS-SC	30 km
855-19212	IE-MiniMc/Telco-LFPT, TP-TX/FX-SM1310/LONG-SC	80 km
855-19213	IE-MiniMc/Telco-LFPT, TP-TX/FX-SM1550/LONG-SC	80 km
<b>IE-MiniMc/LFPT * §</b>		
855-19822 <sup>1</sup>	IE-MiniMc/LFPT, TP-TX/FX-MM850-SC	2 km
855-19824	IE-MiniMc/LFPT, TP-TX/FX-MM1300-SC	5 km
855-19830	IE-MiniMc/LFPT, TP-TX/FX-SM1310/PLUS-SC	30 km
855-19832	IE-MiniMc/LFPT, TP-TX/FX-SM1310/LONG-SC	80 km
855-19833	IE-MiniMc/LFPT, TP-TX/FX-SM1550/LONG-SC	80 km

§ ST Connectors, Single-Strand Fiber and CWDM Fiber models are also available. For more information contact IMC Networks or go to: <http://www.imcnetworks.com/Products/product.cfm?family=13>

<sup>1</sup> Operating Temperature Range for these models is: -4° F to 158° F (-20° C to +70° C)

PART NUMBER	DESCRIPTION
<b>IE-MiniMc Accessories</b>	
806-39105	DIN Rail Clip (IE-GigaMiniMc, IE-ModeConverter & IE-MiniMc)
806-39720	AC Power Adapter (10 watt, 0° C to +50° C) - FranMar
806-39628	USB 36" Power Cable (for MiniMc only)
806-39629	USB 12" Power Cable (for MiniMc only)
806-39638	Double-USB Power Cable, 36"
806-39650	12" Barrel-Connector Power Cable
806-39753	IE-Power/5, AC to DC DIN Rail Power Adapter (-20° C to +70° C)
806-00720-00	Power Adapter Clip (USA) - FranMar
806-00720-01	Power Adapter Clip (UK) - FranMar
806-00720-02	Power Adapter Clip (Europe) - FranMar
806-00720-03	Power Adapter Clip (Australia/New Zealand) - FranMar