

Industrial Grade 10/100/1000 Miniature Media Converters

IE-Giga-MiniMc series

B+B SMARTWORX

Powered by

ADVANTECH

www.advantech-bb.com



PRODUCT FEATURES

- Connects 10/100/1000 Mbps copper to 1000 Mbps fiber
- For use in extended temperature environments
- Cascading power on DIN rail installations
- NEMA TS2 (select models)
- Power options: DC, AC power adapter, dual USB cable and Power/Tray/18 chassis

Media conversion is the most cost-effective and flexible solution for implementing new technologies on legacy wiring plants and equipment. But even reasonably-priced media converters can tack on a substantial sum to networking costs. And space constraints can also be an issue when hundreds of conversions are required.

Measuring less than 8.9cm deep and 5.1cm wide (3.5d x 2.0w in), and having both data connections on the same side of the unit, the IE-Giga-MiniMc is the industry's smallest media converter at a fraction of the cost of other alternatives. It is an unmanaged, plug-and-play converter, offered with a variety of fiber types for single-mode and multi-mode fiber.

The IE-Giga-MiniMc supports extreme operating temperatures (-25 to +85 °C). It can be powered by DC or AC power, installed in a PowerTray/18 (available from B+B SmartWorx), and use a dual USB power cable.

ORDERING INFORMATION

MODEL NUMBER	FIBER	FIBER PORTS	RANGE	ETHERNET PORTS	ETHERNET CONNECTOR
IE-Giga-MiniMc TX/FX SX or LX					
BB-856-18830	MM850-SC	1	220/550 m	1	RJ45
BB-856-18831	SM1310-SC	1	15 km	1	RJ45
BB-856-18832	SM1310/PLUS-SC	1	30 km	1	RJ45
IE-Giga-MiniMc TX/FX SX or LX - NEMA TS2 rated; modular versions without AC adapter					
BB-854-18830	MM850-SC	1	220/550 m	1	RJ45
BB-854-18831	SM1310-SC	1	15 km	1	RJ45
SINGLE STRAND FIBER *					
BB-856-18835	SSLX-SM1310-SC	1	15 km	1	RJ45
BB-856-18836	SSLX-SM1550-SC	1	15 km	1	RJ45

* These products have single-strand fiber technology. Deploy in pairs or connect another compatible Advantech B+B SmartWorx LLC single-strand fiber product.

ACCESSORIES – sold separately

BB-806-39105 - DIN Rail Clip

BB-806-39638 - Double-USB Power Cable, 0.9m (36in)

BB-806-39650 - Barrel-Connector Power Cable, 0.3m (12in)

BB-850-13086 - IE-PowerTray/18-AC (-20 to +70 °C), 18-slot AC Powered Chassis

BB-895-39229 - Wall Mount Bracket

BB-806-39753 - IE-Power/5V Module, AC to DC DIN Rail Power Adapter

BB-806-39720 - AC Power Adapter

All product specifications are subject to change without notice.
IE-Giga-MiniMc_4818ds

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SPECIFICATIONS

TECHNICAL

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	
MTU: Supports Jumbo Frames up to 10240 bytes	
Extended temperature range (DC configuration)	
Plug-and-play operation	
Accepts RJ45 and SC connectors	
50/125µm or 62.5/125µm multi-mode fiber	
9/125µm single-mode fiber, single-strand fiber and CWDM models	
4-terminal DC power with a pair of input terminals and a pair of output terminals for cascading power on DIN installations	
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, 148,810 pps for 100 Mbps, 1,488,096 pps for 1000 Mbps)	
Status LEDs	
Supports DIN rail and wall bracket mounting	
MECHANICAL	
Dimensions	2.11h x 4.57w x 8.51d cm (0.83h x 1.80w x 3.35d in)
Shipping Weight	0.317 kg (0.7 lb)

POWER

AC Adapter	100 to 240 ±10% VAC input, 5 VDC @ 2.0 A, maximum
DC Input Voltage	7 to 50 VDC @ 2.5 Watts, Chassis grounded to negative terminal

ENVIRONMENTAL

Operating Temperature	DC terminal block: -25 to +85 °C (-13 to +18 °F) AC adapter: -10 to +50 °C (+14 to +122 °F)
Storage Temperature	-35 to +75 °C (-31 to +167 °F)
Operating Humidity	5 to 95% (non-condensing)

MEANTIME BETWEEN FAILURE (MTBF)

MTBF	659439 hours
MTBF Calculation Method	MIL217F Parts Count Reliability Prediction

REGULATORY APPROVALS, DIRECTIVES, STANDARDS

FCC Class B, UL/cUL, CSA, CE, NEMA TS2 (select models)	
CE – Directives	2014/30/EU – Electromagnetic Compatibility Directive 2011/65/EU – Reduction of Hazardous Substances Directive (RoHS) 2012/19/EU – Waste Electrical and Electronic Equipment (WEEE) 2014/35/EU – Low Voltage Directive
CE – Standards	EMC: EN 55032 Class B – Electromagnetic Compatibility of Multimedia Equipment - Emission Requirements EN 55024 – Information Technology Equipment - Immunity Characteristics - Limits and Methods of Measurement EN 61000-3-2 – Emissions: Harmonic Currents Injected into the AC Mains EN 61000-3-3 – Emissions: Voltage Fluctuations/Flicker Impressed on AC Mains Safety: EN 60950-1 +A11 +A1 +A12 +A2

MECHANICAL DIAGRAM

Dimensions = inches (mm)

