MiniMc TP-TX/FX
RX/TX Versions

Compact Media Converters



B&B ELECTRONICS

Make The Right Connections



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FCC RADIO FREQUENCY INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B computing device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which the user will be required to correct the interference at his own expense.

Any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

The use of non-shielded I/O cables may not guarantee compliance with FCC RFI limits. This digital apparatus does not exceed the Class B limits for radio noise emission from digital apparatus set out in the Radio Interference Regulation of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de classe B prescrites dans le Règlement sur le brouillage radioélectrique publié par le ministère des Communications du Canada.

WARRANTY

Limited Lifetime Warranty

Effective for products of B&B Electronics Manufacturing Company shipped on or after May 1, 2013, B&B Electronics Manufacturing Company warrants that each such product shall be free from defects in material and workmanship for its lifetime. This limited lifetime warranty is applicable solely to the original user and is not transferable.

This warranty is expressly conditioned upon proper storage, installation, connection, operation and maintenance of products in accordance with their written specifications.

Pursuant to the warranty, within the warranty period, B&B Electronics Manufacturing Company, at its option will:

1. Replace the product with a functional equivalent;

2. Repair the product; or

3. Provide a partial refund of purchase price based on a depreciated value.

Products of other manufacturers sold by B&B Electronics Manufacturing Company are not subject to any warranty or indemnity offered by B&B Electronics Manufacturing Company, but may be subject to the warranties of the other manufacturers.

Notwithstanding the foregoing, under no circumstances shall B&B Electronics Manufacturing Company have any warranty obligations or any other liability for: (i) any defects resulting from wear and tear, accident, improper use by the buyer or use by any third party except in accordance with the written instructions or advice of the B&B Electronics Manufacturing Company or the manufacturer of the products, including without limitation surge and overvoltage conditions that exceed specified ratings, (ii) any products which have been adjusted, modified or repaired by any party other than B&B Electronics Manufacturing Company or (iii) any descriptions, illustrations, figures as to performance, drawings and particulars of weights and dimensions contained in the B&B Electronics Manufacturing Company's catalogs, price lists, marketing materials or elsewhere since they are merely intended to represent a general idea of the products and do not form part of this price quote and do not constitute a warranty of any kind, whether express or implied, as to any of the B&B Electronics Manufacturing Company's products.

THE REPAIR OR REPLACEMENT OF THE DEFECTIVE ITEMS IN ACCORDANCE WITH THE EXPRESS WARRANTY SET FORTH ABOVE IS B&B ELECTRONIC MANUFACTURING COMPANY'S SOLE OBLIGATION UNDER THIS WARRANTY. THE WARRANTY CONTAINED IN THIS SECTION SHALL EXTEND TO THE ORIGINAL USER ONLY, IS IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, AND ALL SUCH WARRANTIES AND INDEMNITIES ARE EXPRESSLY DISCLAIMED, INCLUDING WITHOUT LIMITATION (I) THE IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE AND OF MERCHANTABILITY AND (II) ANY WARRANTY THAT THE PRODUCTS ARE DO NOT INFRINGE OR VIOLATE THE INTELLECTUAL PROPERTY RIGHTS OF ANY THIRD PARTY. IN NO EVENT SHALL B&B ELECTRONICS MANUFACTURING COMPANY BE LIABLE FOR LOSS OF BUSINESS, LOSS OF USE OR OF DATA INTERRUPTION OF BUSINESS, LOST PROFITS OR GOODWILL OR OTHER SPECIAL, INCIDENTAL, EXEMPLARY OR CONSEQUENTIAL DAMAGES. B&B ELECTRONIC MANUFACTURING COMPANY SHALL DISREGARD AND NOT BE BOUND BY ANY REPRESENTATIONS, WARRANTIES OR INDEMNITIES MADE BY ANY OTHER PERSON, INCLUDING WITHOUT LIMITATION EMPLOYEES, DISTRIBUTORS, RESELLERS OR DEALERS OF B&B ELECTRONIC MANUFACTURING COMPANY WHICH ARE INCONSISTENT WITH THE WARRANTY, SET FORTH ABOVE.

ABOUT THE MINIMC

Part Numbers: 855-10622-RX, 855-10622-TX

855-10623-RX, 855-10623-TX

855-10641-RX, 855-10641-TX

The above part numbers must be installed in pairs. As a pair, the units provide secure data to be passed in one direction only.

The MiniMc provides a single conversion between 10/100 Base-T twisted pair and 100 Base-SX/FX fiber. This device Auto Negotiates speed and duplex on the copper port and the fiber 100Mbps, FDX. The media converter supports jumbo frames up to 1916 MTU.

The MiniMc, TX/FX is a fixed fiber transceiver model; it includes one 10/100Mbps RJ-45 connector and one 100Mbps SC fiber connector which can support Single Mode fiber.

INSTALLING THE MINIMC

The MiniMc installs virtually anywhere as a standalone device in locations with extremely limited space. Installation options include:

- Velcro strips
- DIN rail mounting with DIN Rail clips
- A wall mount bracket
- A PowerTray/18 for high density applications

HARDWARE MOUNTING

The IE-MiniMc can be mounted on a DIN rail or using wall mount brackets (shown below).



DIN rail clips (part number 806-39105) and wall mount brackets (part number 895-39229) are available for purchase through a B&B Electronics Distributor.

DIN Rail Clips

The MiniMc can be mounted with two DIN Rail clips, a hardware option available through B&B Electronics. The DIN Rail clips include screws, to allow the installation onto a DIN Rail. Install the screws into DIN Rail clips, which should be mounted perpendicular to the DIN Rail. Snap the converter onto the clips. To remove the converter from the DIN Rail, use a flat-head screwdriver into the slot to gently pry the converter from the rail.



NOTE
The DIN clips are designed for use on a DIN-35 rail.

POWERING THE MINIMC

The MiniMc includes multiple powering options:

- A country-specific, high-reliability AC power adapter (included)
- IE-PowerTray/18 for Rack Mounting
- USB power cable

LED OPERATION

Each MiniMc includes two LEDs, located on the RJ-45 connector. LED functions are as follows for the **TX** Unit:



FX LNK / ACT	**Glows green when a link is established on the FX (fiber) port; blinks green when activity is detected on the fiber port.** **Although the copper and fiber ports may not be physically connected, the FX (fiber) port will always show a green LED, as the link is forced ON, to ensure the connection.**
TX LNK / ACT	**Glows green when a link is established on the TX (copper) port; blinks green when activity is detected on the copper port.**

Each MiniMc includes two LEDs, located on the RJ-45 connector. LED functions are as follows for the **RX** Unit:



FX LNK / ACT	**Glows green when a link is established on the FX (fiber) port; blinks green when activity is detected on the fiber port.**
TX LNK / ACT	**Glows green when a link is established on the TX(copper) port; blinks green when activity is detected on the copper port.**

SPECIFICATIONS

Ethernet Connections

- 10/100 BaseT
- Auto Negotiation
- AutoCross
- Flow Control
- 1916 MTU
- Full Line-Rate Forwarding

AC Wall Adapter

100 to 240 ±10% VAC input, 5 VDC output, 2A max.

Operating Temperature

+14°F to +122°F (-10C° to +50°C)

Storage Temperature

-31°C to +167° F (-35C° to +75°C)

Humidity

5% to 95% (non-condensing), 0 – 10,000 ft. altitude

Input Power Consumption (Typical)

500 mA @ 5 VDC

Dimensions

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

NOTE
Use only the supplied B&B Electronics wall adapter or USB cable with this product. Using a non-B&B Electronics power source will void the warranty.

FIBER OPTIC CLEANING GUIDELINES

Fiber Optic transmitters and receivers are extremely susceptible to contamination by particles of dirt or dust, which can obstruct the optic path and cause performance degradation. Good system performance requires clean optics and connector ferrules.

1. Use fiber patch cords (or connectors, if you terminate your own fiber) only from a reputable supplier; low-quality components can cause many hard-to-diagnose problems in an installation.
2. Dust caps are installed at B&B Electronics to ensure factory-clean optical devices. These protective caps should not be removed until the moment of connecting the fiber cable to the device. Should it be necessary to disconnect the fiber device, reinstall the protective dust caps.
3. Store spare caps in a dust-free environment such as a sealed plastic bag or box so that when reinstalled they do not introduce any contamination to the optics.
4. If you suspect that the optics have been contaminated, alternate between blasting with clean, dry, compressed air and flushing with methanol to remove particles of dirt.

ELECTROSTATIC DISCHARGE PRECAUTIONS

Electrostatic discharge (ESD) can cause damage to any product, add-in modules or standalone units, containing electronic components. Always observe the following precautions when installing or handling these kinds of products

1. Do not remove unit from its protective packaging until ready to install.
2. Wear an ESD wrist grounding strap before handling any module or component. If the wrist strap is not available, maintain grounded contact with the system unit throughout any procedure requiring ESD protection.
3. Hold the units by the edges; do not touch the electronic components or gold connectors.
4. After removal, always place the boards on a grounded, static-free surface, ESD pad or in a proper ESD bag. Do not slide the modules or standalone units over any surface.



WARNING! Integrated circuits and fiber optic components are extremely susceptible to electrostatic discharge damage. Do not handle these components directly unless you are a qualified service technician and use tools and techniques that conform to accepted industry practices.

SAFETY CERTIFICATIONS

UL/CUL: Listed to Safety of Information Technology Equipment, including Electrical Business Equipment.

CE: The products described herein comply with the Council Directive on Electromagnetic Compatibility (2004/108/EC) and the Council Directive on Electrical Equipment Designed for use within Certain Voltage Limits (2006/95/EC). Certified to Safety of Information Technology Equipment, Including Electrical Business Equipment. For further details, contact B&B Electronics.



Class 1 Laser product, Luokan 1 Laserlaite,
Laser Klasse 1, Appareil A'Laser de Classe 1

European Directive 2002/96/EC (WEEE) requires that any equipment that bears this symbol on product or packaging must not be disposed of with unsorted municipal waste. This symbol indicates that the equipment should be disposed of separately from regular household waste. It is the consumer's responsibility to dispose of this and all equipment so marked through designated collection facilities appointed by government or local authorities. Following these steps through proper disposal and recycling will help prevent potential negative consequences to the environment and human health. For more detailed information about proper disposal, please contact local authorities, waste disposal services, or the point of purchase for this equipment.



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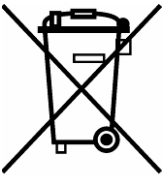
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