MiniMc SFP
MiniMc TP/TX-FX

USER MANUAL

B+B SMARTWORX

Powered by **ADVANTECH**

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ABOUT THE MINIMC

The MiniMc is a 10/100 auto-negotiating miniature media converter. It is available in a fixed optical 1x9 transceiver version, dual or single strand, as well as an SFP version. The optical transceiver port always operates at 100 Mbps full duplex. The copper port auto-senses the connected device's speed (10Mbps or 100Mbps) and duplex mode (HDX or FDX including Flow Control). The MiniMc offers plug-and-play operation, including an AutoCross MDI/MDIX feature that automatically corrects for errors in cable selection making the distinction between a "straight through" cable and a "crossover" cable unimportant. The MiniMc allows jumbo packets of up to 1916 bytes.

NOTE: *Some options require items that are sold separately, available from B+B SmartWorx.*

INSTALLING THE MINIMC

The MiniMc can be installed in a B+B SmartWorx PowerTray/18 (B+B SmartWorx pn# 850-13086) or used as a standalone converter. The MiniMc installs virtually anywhere: as a standalone or table-top device or on a DIN rail. As a standalone device, install MiniMc in locations with limited space. Included, Velcro strips attach the device to most surfaces. A PowerTray/18 is available (sold separately) for high density applications.

DIN RAIL MOUNTING

The MiniMc can be mounted with two DIN rail clips (hardware option available from B+B SmartWorx). The DIN rail clips include screws to allow 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, insert a flat-head screwdriver into the slot to gently pry the converter from the DIN rail.

NOTE: *DIN clips are designed for use on DIN-35 rail.*
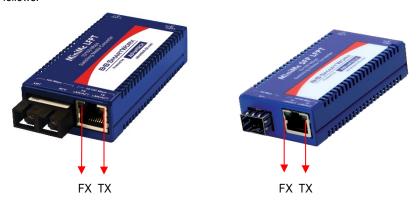
POWERING THE MINIMC

As a standalone converter, the MiniMc can be powered by the supplied AC/DC wall adapter, or an optional USB power cable (B+B SmartWorx pn# 806-39628) for use with high power USB host ports.

The MiniMc includes multiple powering options:

- Country-specific, high-reliability AC power adapter (included)
- IE-PowerTray/18 for Rack Mounting

LED OPERATION

The MiniMc includes two LEDs, located on the RJ-45 connector. LED functions are as follows:

FX TX   FX TX

FX LNK/ACT   Glows green when a link is established on the fiber port;

blinks green when activity is detected on the fiber port.

TX LNK/ACT   Glows green when a link is established on the copper port;

blinks green when activity is detected on the copper port.

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

SPECIFICATIONS

AC Wall Adapter
100 to 240 ±10% VAC Input, 5 VDC Output, 2A (maximum)

Operating Temperature
-10 to +50 °C (+14 to +122 °F)

Storage Temperature
-35 to +75 °C (-31 to +167 °F)

Humidity
5 to 95% (non-condensing); 0 to 10000 ft. altitude

Input Power Consumption (typical, varies with optical transceiver type)
500mA @ 5VDC

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

B+B SMARTWORX TECHNICAL SUPPORT

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STATEMENTS, PRECAUTIONS, GUIDELINES, REGULATORY

FCC RADIO FREQUENCY INTERFERENCE STATEMENT – CLASS B

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.

ELECTROSTATIC DISCHARGE (ESD) PRECAUTIONS

Electrostatic discharge (ESD) can cause damage to any product, add-in modules or stand alone 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 units by the edges; do not touch the electronic components or gold connectors.

4. After removal, always place boards on a grounded, static-free surface, ESD pad or in a proper ESD bag. Do not slide the modules or stand-alone 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.
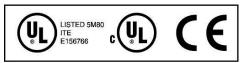
FIBER OPTIC CLEANING GUIDELINES

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 the factory 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.

REGULATORY, STANDARDS, COMPLIANCES

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

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

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 SmartWorx.

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.

Documentation Number: MiniMc_SFP_TP-tx-fx_4718m