

Giga-MiniMc TX/FX, TX-SX Giga-MiniMc TX/SFP

USER MANUAL



B+B SMARTWORX

Powered by

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FCC RADIO FREQUENCY INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class A 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 A 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 A prescrites dans le Règlement sur le brouillage radioélectrique publié par le ministère des Communications du Canada.

ABOUT THIS MANUAL

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ABOUT THE GIGA-MINIMC

The Giga-MiniMc is a 10/100/1000 auto-negotiating, switching miniature media converter. The fiber port available in one pair of SC fiber connectors and/or an SFP port which can support any fiber type; dual strand available in LC connectors, and single strand fiber SFPs available in SC connectors. The Giga-MiniMc always operates at 1000 Mbps FDX; the copper port auto-negotiates the connected device's speed and duplex mode: 10 Mbps, 100 Mbps or 1000 Mbps, and HDX or FDX (including Flow Control).

The Giga-MiniMc TX/SFP requires a Gigabit SFP, with or without DDMI (sold separately from B+B SmartWorx). SFPs must be MSA-compliant and meet the Class 1 Laser Safety Standard. The SFP model also offers "Link Fault Pass Through" (LFPT), a diagnostic feature for troubleshooting. It is a permanently enabled feature.

The Giga-MiniMc offers plug-and-play operation, including the auto-cross feature which automatically selects between a crossover work-station or pass-through connection, depending on the connected device.

NOTE: Unless noted otherwise, all references to the Giga-MiniMc in this manual are also applicable to the Giga-MiniMc TX/SFP.

INSTALLING THE GIGA-MINIMC

The Giga-MiniMc installs in a B+B SmartWorx PowerTray/18 or can be used as a standalone media converter. As a standalone, the Giga-MiniMc/SFP uses a universal external switching power cube with 100 – 240 \pm 10% VAC input and 5 VDC output.

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

POWERING THE GIGA-MINIMC

The Giga-MiniMc supports multiple powering options:

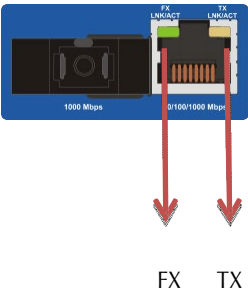
- A country-specific, high-reliability AC power adapter (included)
- IE-PowerTray/18 for Rack Mounting

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

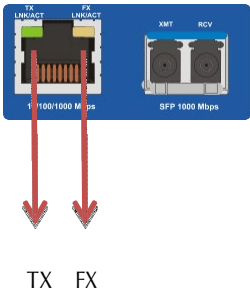
LED OPERATION

Each Giga-MiniMc includes two LEDs located on the RJ-45 connector:

Giga-MiniMc, SC



Giga-MiniMc, SFP



LED functions are as follows (above illustrations are representative):

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 AMBER when a link is established on the copper port; blinks GREEN when activity is detected on the copper port.

SPECIFICATIONS

Ethernet Connections

10/100/1000 BaseT

Auto-Negotiation

Auto-Cross

Flow Control

1536 MTU for the Fixed Fiber versions

10240 MTU for the SFP version

Full Line-Rate Forwarding

Fiber Port - SFP or Fixed Fiber

SFP port supports 100Mbps or 1000Mbps fiber SFPs

Fixed Fiber port is specifically 1000Mbps

AC Wall Adapter

100 to 240 \pm 10% VAC input, 5 VDC output, 2A maximum

Operating Temperature

0 to +50 °C (+32 to +122 °F)

Storage Temperature

-35 to +75 °C (-31 to +167 °F)

Humidity

5 to 95% (non-condensing); 0 to 10000 feet altitude

Dimensions

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

FIBER OPTIC CLEANING GUIDELINES

Fiber Optic transmitters and receivers are extremely susceptible to contamination by particles of dirt or dust that 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 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 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 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 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.

SAFETY CERTIFICATIONS

UL/cUL:

Listed to Safety of Information Technology Equipment, including Electrical Business Equipment.

CE – Directives

2004/108/EC – Electromagnetic Compatibility Directive

2011/65/EU – Reduction of Hazardous Substances Directive (RoHS)

2006/95/EC – Low Voltage Directive

CE – Standards

EMC:

EN 55022 +AC Class A – Information Technology Equipment - Radio Disturbance Characteristics - Limits and Methods of Measurement

EN 55024 – Information Technology Equipment - Immunity Characteristics - Limits and Methods of Measurement



**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.

