

## Warning

The operating description in this Instruction Manual is for use by qualified personnel only. To avoid electrical shock, do not perform any servicing of this unit other than that contained in the operating instructions, unless you are qualified and certified to do so by Omnitron Systems Technology, Inc.

## Warranty

This product is warranted to the original purchaser against defects in material and workmanship for a period of TWO YEARS from the date of shipment. A LIFETIME warranty may be obtained by the original purchaser by REGISTERING this product with Omnitron within 90 days from the date of shipment. TO REGISTER, COMPLETE AND MAIL OR FAX THE ENCLOSED REGISTRATION FORM TO THE INDICATED ADDRESS. Or you may register your product on the Internet at <http://www.omnitron-systems.com>. During the warranty period, Omnitron will, at its option, repair or replace a product which is proven to be defective.

For warranty service, the product must be sent to an Omnitron designated facility, at Buyer's expense. Omnitron will pay the shipping charge to return the product to Buyer's designated US address using Omnitron's standard shipping method.

## Limitation of Warranty

The foregoing warranty shall not apply to defects resulting from improper or inadequate use and/or maintenance of the equipment by Buyer, Buyer-supplied equipment, Buyer-supplied interfacing, unauthorized modifications or tampering with equipment (including removal of equipment cover by personnel not specifically authorized and certified by Omnitron), or misuse, or operating outside the environmental specification of the product (including but not limited to voltage, ambient temperature, radiation, unusual dust, etc.), or improper site preparation or maintenance.

No other warranty is expressed or implied. Omnitron specifically disclaims the implied warranties of merchantability and fitness for any particular purpose.

## Exclusive Remedies

The remedies provided herein are the Buyer's sole and exclusive remedies. Omnitron shall not be liable for any direct, indirect, special, incidental, or consequential damages, whether based on contract, tort, or any legal theory.

### Product Overview

The *miConverter* S/GXT Gigabit fiber to 10/100/1000BASE-T and the S/FXT Fast Ethernet fiber to 10/100/1000BASE-T media converters are ideal for mobile applications where light weight, compact size and low power are critical requirements.



The *miConverter* S-Series delivers plug-and-play set up with an RJ-45 port that auto-negotiates the speed, duplex mode and cross-over functions for laptops with 10BASE-T, 100BASE-TX or 1000BASE-T Ethernet.

### Installation Procedure

#### 1) Connect Cables

- a. The *miConverter* S/GXT and S/FXT can be wall mounted using the optional wall mount bracket (1691-0) or placed on a flat level surface.

To power the module using the USB cable, connect the USB Standard Type A connector to a USB port on the computer. Then connect the USB Micro-B connector at the other end of the cable to the connector on the back of the *miConverter*. Confirm that the module has powered up properly by checking the power status LED located on the top of the module.

To power the module using the AC/DC adapter, connect the USB Standard Type A connector to the AC/DC adapter and connect the AC/DC adapter to the AC outlet. Then connect the USB Micro-B connector at the end of the cable to the connector on the back of the *miConverter*. Confirm that the module has powered up properly by checking the power status LED located on the top of the module.

- b. Connect the UTP port via a Category 5 or better cable to a 10BASE-T, 100BASE-TX or 1000BASE-T Ethernet device.
- c. When using fixed fiber port models, connect the appropriate multimode or single-mode fiber cable to the fiber port of the installed module. It is important to ensure that the transmit (Tx) is attached to the receive side of the device at the other end and the receive (Rx) is attached to the transmit side. Single-fiber (SF) media converter models operate in pairs. The Tx wavelength must match the Rx wavelength at the other end and the Rx wavelength must match the Tx wavelength at the other end.

When using an SFP model, insert the SFP Fiber transceiver into the Port 1 SFP receptacle on the module.

NOTE: The release latch of the SFP Fiber transceiver must be in the closed (up) position before insertion.

#### 2) Verify Operation

Once the module has been installed, verify the module is operational by viewing the LED indicators.

LED Function "Legend"	Color	OFF State	ON/Blinking State
Power "PWR"	Green	No power	ON: Module has power
Fiber Link Activity "F/O"	Green	No fiber link	ON: Fiber link Blinking: Data activity
UTP Link Activity "10"	Green	No UTP link	ON: Port linked at 10M Blinking: Data activity
UTP Link Activity "1000"	Green	No UTP link	ON: Port linked at 1000M Blinking: Data activity
UTP Link Activity "10" and "1000"	Green	No UTP link	ON: Port linked at 100M Blinking: Data activity

## Specifications

Model	<i>miConverter S/GXT</i>	<i>miConverter S/FXT</i>
Description	1000BASE-X Fiber to 10/100/1000BASE-T UTP Converter	100BASE-FX Fiber to 10/100/1000BASE-T UTP Converter
Protocols	10BASE-T, 100BASE-TX, 1000BASE-T, 1000BASE-X	10BASE-T, 100BASE-TX, 1000BASE-T, 100BASE-FX
Frame Size	10,240 byte max frame size	
Compliance	UL, CE, FCC 15 Class B	
UTP Cable	EIA/TIA 568A/B, Cat 5 and higher	
Fiber Cable	Multimode: 50/125, 62.5/125, 100/140um Single-mode: 9/125um	
Copper Connector	RJ45	
Fiber Connector	SFP: LC Dual Fiber: SC, ST Single-Fiber: SC	
LED Display	Pwr, F/O, UTP	
Dimensions	W: 1.75" x L: 2.25" x H: 0.84"	
Weight	without AC/DC adapter: 2.5 oz. with USB cable: 3.8 oz. with AC/DC adapter (US) and USB: 5.4 oz.	
DC Power Input Connector	USB Micro-B	
DC Power Requirements	0.5A @ 5VDC	
AC Power Requirements (US)	100-120VAC 50-60Hz 0.02A @ 120V	
AC Power Requirements (Univ.)	100-240VAC 50-60Hz 0.02A @ 120VAC	
Temperature	Standard: 0 to 50°C Wide: -40 to 65°C Storage: -40 to 80°C	
Humidity	5 to 95% (non-condensing)	
Altitude	-100m to 4000m	
MTBF (hrs)	without AC/DC adapter: 1,300,000 US AC/DC adapter: 50,000 Univ AC/DC adapter: 200,000	

## Ordering Information

Fiber Type	Distance	Connector Type			
		ST	ST Metal	SC	SFP (LC)
<i>miConverter S/FXT Fast Ethernet Fiber Media Converter</i>					
SFP	-	-	-	-	1619-0-x
MM/DF	5km	1600-0-x	1600M-0-x	1602-0-x	-
SM/DF	30km	1601-1-x	1601M-1-x	1603-1-x	-
SM/SF*	20km	-	-	1610-1-x	-
SM/SF*	20km	-	-	1611-1-x	-
<i>miConverter S/GXT Gigabit Ethernet Fiber Media Converter</i>					
SFP	-	-	-	-	1639-0-x
MM/DF	220m/550m	1620-0-x	1620M-0-x	1622-0-x	-
SM/DF	12km	1621-1-x	1621M-1-x	1623-1-x	-
SM/DF	34km	-	-	1623-2-x	-
SM/SF*	20km	-	-	1630-1-x	-
SM/SF*	20km	-	-	1631-1-x	-
<b>When choosing power options, replace (-x) in the model number with the suffix number that corresponds to the selected power adapter.</b>					
-1	Includes US AC/DC power adapter and USB power cable				
-1T	Includes US AC/DC power adapter, USB power cable and travel case				
-3	Includes European AC/DC power adapter and USB power cable				
-4	Includes UK AC/DC power adapter and USB power cable				
-5	Includes Australian AC/DC power adapter and USB power cable				
-6	NO AC/DC power adapter. Includes USB power cable				
-6T	NO AC/DC power adapter. Includes USB power cable and travel case				
-8	Includes Japan AC/DC power adapter and USB power cable				
-8T	Includes Japan AC/DC power adapter, USB power cable and travel case				
Example: 1623-2-4 = SM / DF / 34km with UK AC/DC power adapter and USB power cable.					
*Single-Fiber converters must be used in pairs. The Tx wavelength on one end has to match the Rx wavelength on the other. For wide temperature models (-40 to 65° C), add a "W" to the end of the model number. Contact Omnitron for other configurations.					
Model No.	Description				
9146-1	Spare US/USB AC/DC adapter and 3ft. USB power cable				
9146-3	Spare Euro/USB AC/DC adapter and 3ft. USB power cable				
9146-4	Spare UK/USB AC/DC adapter and 3ft. USB power cable				
9146-5	Spare Aus/USB AC/DC adapter and 3ft. USB power cable				
9146-8	Spare Japan/USB AC/DC adapter and 3ft. USB power cable				
9146-6	3ft. USB power cable (standard Type A plug to micro-B plug)				
1691-0	<i>miConverter S-Series</i> wall mount bracket				
1692-0	Spare <i>miConverter S-Series</i> travel case				