

**miConverter™ 10/100 Media Converter  
User Manual**



**GENERAL:**

This User Manual covers the following model numbers:

miConverter 10/100 Models						
Fiber Mode Type Dual Fiber (DF) or Single-Fiber (SF)	Distance	Connector Types		Tx Wavelength [nm]	Rx Wavelength [nm]	
		ST	SC			
MM / DF	5km	1100-0-x	1102-0-x	1310	1310	
SM / DF	30km	1101-1-x	1103-1-x	1310	1310	
SM / DF	60km	1101-2-x	1103-2-x	1310	1310	
SM / DF	120km	-	1103-3-x	1550	1550	
SM / SF	20km	-	1110-1-x	1310	1550	
SM / SF	20km	-	1111-1-x	1550	1310	
SM / SF	40km	-	1110-2-x	1310	1550	
SM / SF	40km	-	1111-2-x	1550	1310	

When choosing power options, replace (-x) in the model number with the suffix number that corresponds to the power supply of choice below. Example: 1103-3-6 stands for 1103-3-x with USB Power Adapter

- 1 US Power Supply - 120Volt / 60Hz
- 2 Universal Power Supply (requires AC power cord) - 100-240Volt / 50-60Hz
- 3 Euro Power Supply - 100-240Volt / 50-60Hz
- 4 UK Power Supply - 100-240Volt / 50-60Hz
- 5 Australia Power Supply - 100-240Volt / 50-60Hz
- 6 USB Power Adapter Cable
- 8 Japanese Power Supply - 100-240Volt / 50-60Hz

For power supplies -3, -4, -5 and -8, country/region specific clips are used to provide the necessary power connection.

Accessories	
Wall Mounting Hardware Kit	4381
USB Power Adapter Cable	9130-2
US Domestic AC Power Adapter	9113-PS
Universal AC Power Adapter (requires AC power cord)	9115-PS
Europe AC Power Adapter	9116-PS-3
United Kingdom AC Power Adapter	9116-PS-4
Australia AC Power Adapter	9116-PS-5
Japanese AC Power Adapter	9116-PS-8
European Connector Clip*	9116-3
UK Connector Clip*	9116-4
Australian Connector Clip*	9116-5
Japanese Connector Clip*	9116-8

\*All spare Connector Clips are interchangeable with AC Power Adapters 9116-PS-3, 9116-PS-4, 9116-PS-5 and 9116-PS-8

**DESCRIPTION:**

The miniature miConverter™ 10/100 is a rate-switching UTP copper to 100BASE-FX fiber media converter that provides cost-effective fiber extension and connectivity. The miConverter 10/100's UTP copper port can automatically detect the speed, duplex-mode and cross-over mode of the connected device.

The 100BASE-FX fiber port operates in Full-Duplex mode and supports single-mode or multimode fiber with ST or SC fiber connectors. Single-fiber models feature Bi-Directional fiber and support distances of up to 40km. The various fiber model options are described in the table on the first page.

**WARNING!**

*Before inserting the Power Adapter, verify that the power on the unit is appropriate for your AC line voltage source.*

**POWER ADAPTER NOTICE:**

This product should only be used with Omnitron Supplied Power Unit model numbers 9113-PS, 9115-PS, 9130-2, 9116-PS-3, 9116-PS-4, 9116-PS-5 or 9116-PS-8.

In order to guarantee performance when powering the miConverter 10/100 with the USB Power Adapter cable (P/N 9130-2), the USB adapter cable must be connected to a Full-Powered USB Type-A port (5V, 500mA).

**Note: Not all USB Type-A ports are Full-Powered USB ports. The Full-Powered USB Type-A ports are usually the USB ports found on computer cases or on self-powered (powered by an AC adapter) USB hubs.**

**MOUNTING AND CABLE ATTACHMENT:**

The miConverter 10/100 can be quick-mounted using the included Velcro® strips, or permanently mounted using the optional wall-mounting kit (P/N 4381).

Attach the UTP port of the miConverter 10/100 to a 10BASE-T or 100BASE-TX Ethernet device, via a category 5 cable.

Attach the fiber port of the miConverter 10/100 to a 100BASE-FX Fast Ethernet device, via the fiber cable of the appropriate mode and type.

When connecting the dual-fiber models, the miConverter

**SPECIFICATIONS:**

miConverter 10/100 Specifications	
Description	Miniature 10/100 UTP to 100 Fiber Media Converter
Protocols	10BASE-T, 100BASE-TX, 100BASE-FX with 1536 bytes max. frame size, IEEE 802.3 specification
Cable Types	
UTP	EIA/TIA 568A/B, Category 5 and higher
Fiber	Multimode: 50/125, 62.5/125, 100/140 um Single-mode: 9/125 um
Connector Types	
UTP	RJ45
Fiber	Dual fiber: SC, ST Single-fiber: SC
LED Displays	Pwr, FO-Lk/Act, UTP-Lk/Act, UTP-10/100, HDX/FDX
Power Requirements	
DC Power	0.5A @ 5VDC
DC Power Connector	2.5mm DC Jack - Center Positive
AC Power Adapter [US]	100-120VAC/60Hz 0.03A @ 120VAC
AC Power Adapter [Universal or Country/Region Specific]	100-240VAC/50-60Hz 0.03A @ 120VAC

**SPECIFICATIONS (CONT):**

Dimension	W:1.71" x L:4.10" x H:0.84"
Weight	
without power adapter	4 oz.
with USB power adapter cable	5 oz.
with AC power adapter [US]	12 oz.
with AC power adapter [Universal]	18 oz.
Compliance	UL, CE, FCC Class A
Temperature	
Operational - Commercial	0 to +50°C
Storage	-50 to +80°C
Humidity (non-condensing)	5% to 95%
Altitude	-100m to 4000m
MTBF [hrs]	
without power adapter	1,340,000
with US or Country/Region Specific power adapter	250,000
with Universal power adapter	100,000

**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.

**Caution**

All user-required operations can be performed without opening the unit. Never attempt to open or remove the cover or tamper with the unit.

**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

transmitter (Tx) must attach to the receiver side of its link partner; the receiver (Rx) must attach to the transmitter.

When using single-fiber (SF) media converter models, the Tx wavelength on one end has to match the Rx wavelength on the other. Based on this guideline, the SF media converter models must be used in pairs, such as the 1110-1-x matched with the 1111-1-x.

**LED INDICATORS:**

Function	Legend	Color	Off	On
Power	Pwr	Amber	No power	Power applied
F/O Link-Act	F/O	Green	No link	Solid = Link Blink = Data Received
UTP Link-Act	UTP	Green	No link	Solid = Link Blink = Data Received
10(Off)/100(On)	100	Green	UTP at 10Mbps when UTP Link is active	UTP at 100Mbps when UTP Link is active
HDX(Off)/FDX(On)	FDX	Green	Half-Duplex when UTP Link is active	Full-Duplex when UTP Link is active

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.

**TECHNICAL SUPPORT:**

For help with this product, contact Omnitron's Tech. Support:

Phone: (949) 250-6510  
 Fax: (949) 250-6514  
 Address: Omnitron Systems Technology, Inc.  
 140 Technology Drive, #500  
 Irvine, CA 92618 USA  
 E-mail: support@omnitron-systems.com  
 URL: http://www.omnitron-systems.com