# iConverter

#### *iConverter*® 1000FF Gigabit Fiber-to-Fiber Managed Media Converter

The *iConverter* 1000FF managed media converter is a member of the modular *iConverter* product family. The 1000FF provides single-mode to multimode fiber conversion and is a cost-effective solution to extending network distances by connecting multimode fiber network devices over single-mode fiber cabling.

*iConverter* 1000FF models feature SC connectors and are available with multimode, single-mode and single-fiber options. The single-mode fiber port supports distances up to 80km, and the multimode fiber port supports distances up to 550m.

The 1000FF features user-selectable Link Propagate and Remote Fault Detection modes to facilitate quick fault detection, isolation, and reporting.

*iConverter* 1000FF modules are hot-swappable and can be mounted in a 19-Module (2U high) or 5-Module (1U high) rackmountable chassis (19-inch or 23-inch) with any combination of redundant AC, 24VDC or 48VDC power supplies. They can also be mounted in a 2-Module AC or 18 to 60VDC powered chassis, or in a 1-Module AC/DC powered chassis.



The *iConverter* family of managed fiber access media converters are used in Service Provider access networks and Enterprise LANs. *iConverter* media converters provide fiber connectivity with copper to fiber, multimode fiber to single-mode fiber, or dual fiber to single-fiber conversions.



- 1000BASE-SX or 1000BASE-LX single-mode to multimode fiber converter
- Supports multimode, single-mode and single-fiber with SC connectors
- Supports distances up to 80km

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- User-selectable link fault detection modes facilitate quick fault detection, isolation and reporting
- SNMP management via *NetOutlook*<sup>™</sup> provides real-time port and module information, remote parameter configuration and trap notification
- Management is available with the addition of a management module to the chassis
- Modules are hot-swappable in 19-Module, 5-Module, 2-Module or 1-Module chassis
- LED displays for immediate visual status of each port

**Omnitron Systems** 

Technology, Inc.

Lifetime Warranty and free 24/7 Technical Support

# **SPECIFICATIONS**

Model Type	1000FF					
Protocols	1000BASE-SX, 1000BASE-LX					
Connectors	SC, Single-Fiber SC					
Controls	LP, RFD					
LED Displays	Power, Fiber Optic link (2)					
Dimensions	W:0.85" x D:4.5" x H:2.8"					
Weight	8 oz.					
Compliance	UL, CE, FCC Class A, NEBS Level 3					
Power Requirement	0.5A @ 3.3VDC (typical)					
Temperature	Standard: 0 to 50° C   Wide: -40 to 60° C   Storage: -40 to 80° C					
Humidity	5 to 95% (non-condensing)					
Altitude	-100m to 4000m					
MTBF (hrs)	1,600,000					

### ORDERING INFORMATION

## MANAGEMENT

Management is accomplished by using a management module that provides monitoring, remote configuration and trap notification. The management module can be accessed via SNMP, Telnet and via a serial port. The SNMP-based management is accomplished via Omnitron's intuitive, graphicoriented *NetOutlook* management software or third party SNMP management software, while the Telnet and the serial interfaces have an easy-to-use, menu-driven interface.

Some of the real-time 1000FF parameters that can be monitored include power, link and data receive status.

The user can override the 1000FF module's physical switch settings by using SNMP or Telnet to remotely configure switch-selectable parameters such as Link Propagate or Remote Fault Detection.

In addition to all standard *iConverter* SNMP traps such as module insertion and removal, the 1000FF modules can generate traps on port state changes including link-up and link-down. Trap monitoring of specific events can be selectively enabled or disabled by the network administrator.

Model Type	Connector Type SC/SC	Fiber Type <u>Port 1</u> Port2	Distance <u>Port 1</u> Port2	Tx Wavelength (nm)	Rx Wavelength (nm)	Min. Tx Power (dBm)	Max. Tx Power (dBm)	Min. Rx Sensitivity (dBm)	Max. Rx Sensitivity (dBm)	Link Budget (dBm)
1000FF Dual Fiber	8642-1	MM/DF	220 / 550m 1	850	850	-10	-4	-17	-3	7
		SM	12km	1310	1310	-9.5	-3	-19.5	-3	10
	8642-2	MM/DF	220 / 550m 1	850	850	-10	-4	-17	-3	7
		SM	34km	1310	1310	-5	0	-23	-3*	18
	8642-3	MM/DF	220 / 550m 1	850	850	-10	-4	-17	-3	7
		SM	80km	1550	1550	-5	0	-23	-3*	18
	8643-2	SM	12km	1310	1310	-9.5	-3	-19.5	-3	10
		SM	34km	1310	1310	-5	0	-23	-3*	18
	8643-3	SM	12km	1310	1310	-9.5	-3	-19.5	-3	10
		SM	80km	1550	1550	-5	0	-23	-3*	18
1000FF Port 1 Dual Fiber Port 2 Single-Fiber	8650-1	MM/DF	220 / 550m 1	850	850	-10	-4	-17	-3	7
		SM	20km	1310	1550	-9.5	-3	-20	-3	10.5
	8651-1	MM/DF	220 / 550m 1	850	850	-10	-4	-17	-3	7
		SM	20km	1550	1310	-9.5	-3	-20	-3	10.5
	8652-1	SM/DF	12km	1310	1310	-9.5	-3	-19.5	-3	10
		SM	20km	1310	1550	-9.5	-3	-20	-3	10.5
	8653-1	SM/DF	12km	1310	1310	-9.5	-3	-19.5	-3	10
		SM	20km	1550	1310	-9.5	-3	-20	-3	10.5
	8652-2	SM/DF	12km	1310	1310	-9.5	-3	-19.5	-3	10
		SM	40km	1310	1550	-3	0	-20	-3*	17
	8653-2	SM/DF	12km	1310	1310	-9.5	-3	-19.5	-3	10
		SM	40km	1550	1310	-3	0	-20	-3*	17

For wide temperature modules (-40 to 60°C), add a "W" to the end of the model number. Consult factory for extended temperature (-40 to +75°C) models. \*A minimum of 3dB of attenuation is required for these models. When using single-fiber (SF) media converter models, the Tx wavelength on one end has to match the Rx wavelength on the other. <sup>1</sup>62.5/125µm, 100/140µm multimode fiber up to 220m. 50/125µm multimode fiber up to 550m. Refer to the fiber cable manufacturer for multimode distance specifications.

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