# iConverter 1000FF

#### Gigabit Fiber-to-Fiber Managed Media Converter

The *iConverter* 1000FF managed media converter provides multimode to single-mode and dual fiber to single fiber conversion, and is a cost-effective solution for extending fiber network distances.

*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.

The *iConverter* 1000FF is available as a compact, unmanaged standalone unit, or as a chassis plug-in module that can be managed with a management module installed in the chassis. The hot-swappable plug-in module can be mounted in a high-density 19 or 5-Module chassis with any combination of redundant AC and DC power supplies. It can also be mounted in a 2-Module AC or DC powered chassis, or in a 1-Module chassis with AC or DC power input.

The standalone 1000FF can be wall-mounted and is DC powered. It can be ordered with an external AC/DC power adapter, or it can be directly powered using a 2-pin terminal connector.



The *iConverter* Multi-Service Platform consists of Network Interface Devices, T1/E1 multiplexers, CWDM multiplexers and managed media converters that combine to deliver Carrier Ethernet and TDM services over fiber or CWDM wavelengths. This flexible architecture supports a wide variety of configurations for scalable and reliable fiber connectivity in Service Provider and Enterprise networks.



## **KEY FEATURES**

- 1000BASE-SX or 1000BASE-LX single-mode to multimode fiber converter
- Supports multimode, single-mode and single-fiber with SC connectors
- Supports distances of 80km or longer\*
- User-selectable link fault detection modes facilitate quick fault detection, isolation and reporting
- SNMP management via *NetOutlook*® 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
- Lifetime Warranty and free 24/7 Technical Support

\*Contact Omnitron

#### **SPECIFICATIONS**

Model Type	iConverter 1000FF						
Protocols	1000BASE-SX, 1000BASE-LX						
Compliance	UL, FCC Class A, CE, NEBS Level 3						
Fiber Connectors	SC, Single-Fiber SC						
Controls	LP, RFD						
LED Displays	Power, FO link (2)						
	Plug-in: W 0.85" x D 4.5" x H 2.8"						
Dimensions	Standalone: W 3.8" x D 4.8" x H 1.0"						
	Plug-in: 8 oz.						
Weight	Standalone without Power Adapter: 1.0 lb.						
	Standalone with Power Adapter: 1.5 lb.						
	Plug-in: Power supplied by backplane						
DC Power Connector	Standalone: 2.5mm Barrel Connector or 2 Pin Terminal Connector						
DC Bower	Plug-in: 0.5A @ 3.3VDC						
DC Power Requirement (typical)	Standalone: 5 - 32VDC 0.3A @ 9VDC (1.0A max)						
AC Power Adapter	Plug-in: N/A						
[US]	Standalone: 100 - 120VAC/60Hz 0.05A @ 120VAC						
AC Bower Adoptor	Plug-in: N/A						
AC Power Adapter [Universal]	Standalone: 100 - 240VAC/50 to 60Hz 0.05A @ 120VAC						
	Standard: 0° to 50° C						
Temperature	Wide: - 40° to 60° C						
	Storage: - 40° to 80° C						
Humidity	5 to 95% (non-condensing)						
Altitude	- 100m to 4000m						
	Plug-in: 1,600,000						
MTBF (hrs)	Standalone with US Power Adapter: 250,000						
	Standalone with Universal Adapter: 100,000						

### MANAGEMENT

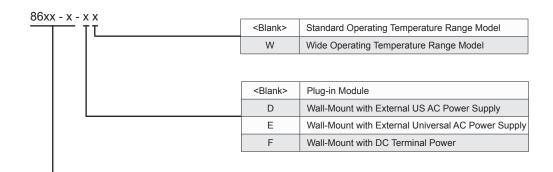
Management of the plug-in module is accomplished by using a Management Module (such as an *iConverter* NMM2 or 10/100M2) that provides monitoring, configuration and trap notification. The management module can be accessed via SNMP, Telnet, or serial port. The SNMP-based management is accomplished via Omnitron's intuitive, graphic-oriented *NetOutlook* management software or third party SNMP management software, while the Telnet and the serial interfaces have an easy-to-use, menu-driven interface.

Real-time 1000FF parameters that can be monitored include power, link, data receive status, module type and model, hardware and software revisions, serial numbers and a userdefined identifier.

The user can override the 1000FF module's physical DIPswitch settings by using SNMP or Telnet to configure DIPswitch-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.

## ORDERING INFORMATION



Model Type	Connector Type SC/SC	Fiber Type Port 1 Port2	Distance Port 1 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 <sup>1</sup>	850	850	-10	-4	-17	-3	7
		SM	12km	1310	1310	-9.5	-3	-19.5	-3	10
	8642-2	MM/DF	220 / 550m <sup>1</sup>	850	850	-10	-4	-17	-3	7
		SM	34km	1310	1310	-5	0	-23	-3*	18
	8642-3	MM/DF	220 / 550m <sup>1</sup>	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 <sup>1</sup>	850	850	-10	-4	-17	-3	7
		SM	20km	1310	1550	-9.5	-3	-20	-3	10.5
	8651-1	MM/DF	220 / 550m <sup>1</sup>	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 other fiber configurations and 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.

162.5/125µm, 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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