iConverter **OC12FF**
Multimode to Single-Mode Managed Media Converter

The *iConverter* OC12FF managed media converter provides multimode to single-mode and dual to single fiber conversion, and is a cost-effective solution for extending SONET/SDH network distances.

iConverter OC12FF models are available with multimode, single-mode, and single-fiber options. The single-mode fiber port supports SC connectors and distances up to 80km. The multimode fiber port supports SC connectors and distances up to 550m.

The *iConverter* OC12FF features user-selectable Link Propagate and Remote Fault Detection modes to facilitate quick fault detection, isolation and reporting.
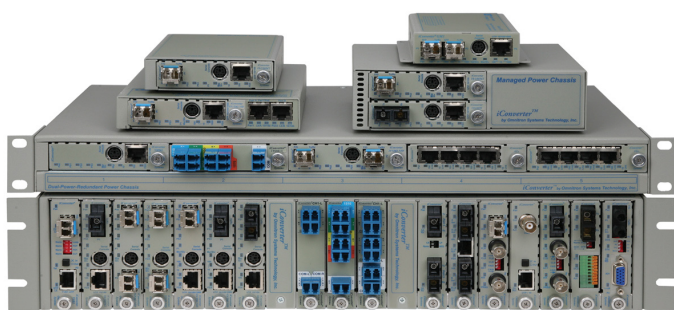
The *iConverter* OC12FF is available as a compact, unmanaged standalone unit, or as a chassis plug-in module that can be managed with a management module installed in the chassis. The hot-swappable plug-in module can be mounted in a high-density 19 or 5-Module chassis with any combination of redundant 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 OC12FF 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

■ OC-12 multimode to single-mode 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

■ Management is available with the addition of a management module to the chassis

■ SNMP management via *NetOutlook*® provides real-time port and module information, remote parameter configuration and trap notification

■ 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

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SPECIFICATIONS

Model Type	iConverter OC12FF	
Protocols	OC-12, STM-4	
Compliance	UL, FCC Class A, CE, NEBS Level 3	
Fiber Connectors	SC, Single-Fiber SC	
Controls	LP, RFD	
LED Displays	Power, FO link (2)	
Dimensions	Plug-in:	W 0.85" x D 4.5" x H 2.8"
	Standalone:	W 3.8" x D 4.8" x H 1.0"
Weight	Plug-in:	8 oz.
	Standalone without Power Adapter:	1.0 lb.
	Standalone with Power Adapter:	1.5 lb.
DC Power Connector	Plug-in:	Power supplied by backplane
	Standalone:	2.5mm Barrel Connector or 2 Pin Terminal Connector
DC Power Requirement (typical)	Plug-in:	0.5A @ 3.3VDC
	Standalone:	5 - 32VDC 0.3A @ 9VDC (1.0A max)
AC Power Adapter [US]	Plug-in:	N/A
	Standalone:	100 - 120VAC/60Hz 0.05A @ 120VAC
AC Power Adapter [Universal]	Plug-in:	N/A
	Standalone:	100 - 240VAC/50 to 60Hz 0.05A @ 120VAC
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)	Plug-in:	1,600,000
	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 OC12FF parameters that can be monitored include power, link, data receive status, module type and model, hardware and software revisions, serial numbers and a user-defined identifier.

The user can override the OC12FF module's physical DIP-switch settings by using SNMP or Telnet to configure DIP-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 OC12FF 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.

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	<Blank>	Standard Operating Temperature Range Model
	W	Wide Operating Temperature Range Model

	<Blank>	Plug-in Module
	D	Wall-Mount with External US AC Power Supply
	E	Wall-Mount with External Universal AC Power Supply
	F	Wall-Mount with DC Terminal Power

Model Type	Fiber Type (Port 1 / Port2)	Distance Port 1	Distance Port 2	Connector Types SC/SC	Fiber Type 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)
OC12FF Dual Fiber	MM / SM	550m	12km	8681-1	MM	1310	1310	-20	-14	-26	-14	6
					SM	1310	1310	-9.5	-3	-19.5	-3	10
	MM / SM	550m	34km	8681-2	MM	1310	1310	-20	-14	-26	-14	6
					SM	1310	1310	-5	0	-23	-3*	18
	MM / SM	550m	80km	8681-3	MM	1310	1310	-20	-14	-26	-14	6
					SM	1550	1550	-5	0	-23	-3*	18
OC12FF Single-Fiber	MM / SM	550m	20km	8690-1	MM	1310	1310	-20	-14	-26	-14	6
					SM	1310	1550	-9.5	-3	-20	-3	10.5
	MM / SM	550m	20km	8691-1	MM	1310	1310	-20	-14	-26	-14	6
					SM	1550	1310	-9.5	-3	-20	-3	10.5
	SM / SM	12km	20km	8692-1	SM	1310	1310	-9.5	-3	-19.5	-3	10
					SM	1310	1550	-9.5	-3	-20	-3	10.5
	SM / SM	12km	20km	8693-1	SM	1310	1310	-9.5	-3	-19.5	-3	10
					SM	1550	1310	-9.5	-3	-20	-3	10.5

For wide temperature (-40 to 60ºC), add a "W" to the end of the model number. Consult factory for other fiber configurations and extended temperature (-40 to +75º C) models.

When using single-fiber (SF) media converter models, the Tx wavelength on one end has to match the Rx wavelength on the other.

*A minimum of 3dB of attenuation is required for these models.

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800-675-8410 • 949-250-6510 • www.omnitron-systems.com • info@omnitron-systems.com • 140 Technology Dr. Irvine, CA 92618