iConverter STM 1
STM-1/OC-3 Coax to Fiber Media Converter

The *iConverter* STM 1 copper to fiber media converter converts 155.52 Mbps STM-1e coax to STM-1 fiber. It can be used in Telecom or Enterprise applications where STM-1 or OC-3 transport is required beyond the maximum distance of copper (approximately 70m).

The copper port provides two mini-BNC 75W coax connectors that comply with the ITU-T G.703 and Telcordia GR-253 standards for CMI coded 155.52 Mbps electrical interfaces. Adapter cables are included to convert the mini-BNC connectors to standard BNC type connectors.

The fiber port accepts any standard, MSA compatible 155.52 Mbps Small Form Pluggable (SFP). Please refer to Omnitron's SFP data sheet for standard STM-1/OC-3 and CWDM wavelength SFPs for ordering information.
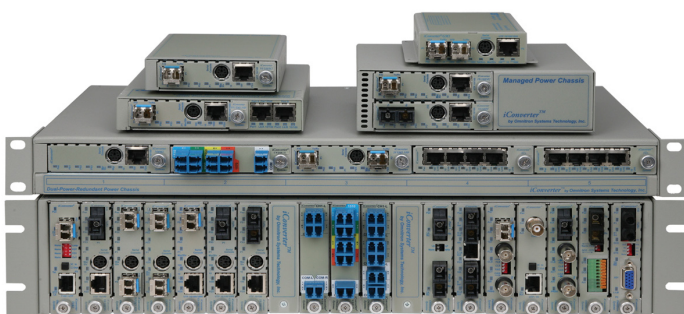
The *iConverter* STM 1 media converter is available as a compact, unmanaged standalone unit, or as a chassis managed plug-in module. The hot-swappable plug-in module can be mounted in a 19 or 5-Module chassis with any combination of redundant AC and DC power supplies. It can also be mounted in a 2-Module AC or DC powered chassis, or in a 1-Module chassis with AC or DC power input.

The standalone unit is wall-mountable. It is DC powered and is available with an external AC/DC power adapter or a terminal connector for direct DC power.

Includes mini-BNC to BNC Adapter Cable

KEY FEATURES

■ Converts STM-1 or OC-3 75W coax to fiber

■ Features standard STM-1e coax interface with mini-BNC connectors

■ Adapter cables convert to standard BNC type connectors

■ Features standard STM-1o (or OC-3) optical interface

■ Standalone or plug-in module

■ Modules are hot-swappable in 19-Module, 5-Module, 2-Module or 1-Module chassis

■ Managed or unmanaged

■ Per port LED status display

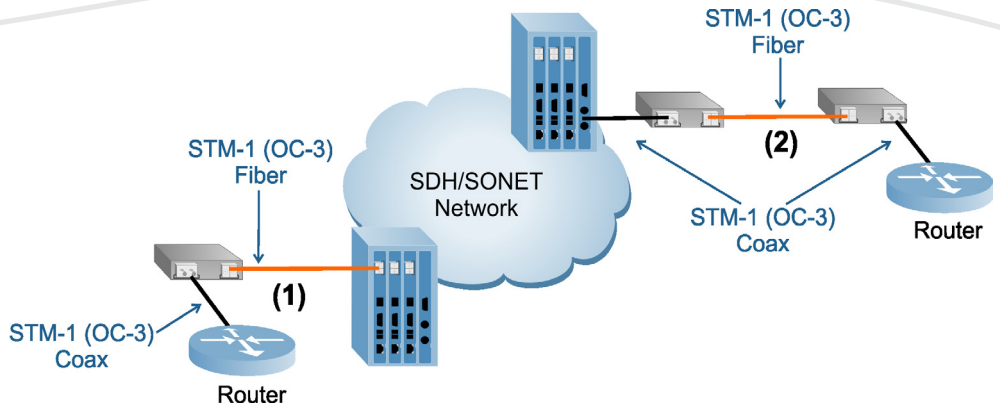■ Lifetime Warranty and free 24/7 Technical Support

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.

OST Omnitron Systems Technology, Inc.

APPLICATION EXAMPLE

The following application shows a typical SDH/SONET network where the SDH/SONET Add/Drop multiplexers drop off STM-1 (OC-3) coax or fiber to customer premises. The SDH/SONET routers at the end of each drop utilize coax interfaces.

The diagram depicts two applications of the *iConverter* STM 1 copper to fiber media converter.

In the case of a coax drop from the network (a), two converters are used to convert the coax to fiber, and then back to coax for connection to the router. The use of the media converters allows the STM-1 electrical signal to reach far beyond the distance limitations of the coax.

In the case of a fiber drop from the network (b), a single converter is used to convert the optical fiber to coax, for connection to the router.

STM-1 (OC-3) Fiber

STM-1 (OC-3) Fiber

(2)

SDH/SONET Network

STM-1 (OC-3) Coax

Router

(1)

STM-1 (OC-3) Coax

Router

ORDERING INFORMATION

8 8 9 9 S - 0 - x x

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

<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

Order the required OC-3/STM-1 fiber SFP separately. See SFP data sheet (091-17000-001) for supported transceiver models.

SPECIFICATIONS

Model Type	*iConverter* STM 1 Coax to Fiber Converter
Protocols	STM-1, STS-3/OC-3
Compliance	UL, FCC Class A, CE
Fiber Interface	ITU-T-G.957, Telcordia GR-253 Physical interface: SFP
Copper Interface	ITU-T G.703 and Telcordia GR-253 for CMI coded 155.52Mbps electrical interfaces. Physical interface: mini-BNC connectors. Adapter cables for full size BNC connectors also included
Controls	LP, RFD
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: 7 - 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: 900,000 Standalone with US Power Adapter: 250,000 Standalone with Universal Adapter: 100,000

OST **Omnitron Systems Technology, Inc.**

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

iConverter STM1 Coax to Fiber Media Converter   Page 2