

### iConverter® T3/E3

#### T3/E3 Managed Media Converter

The iConverter T3/E3 is a T3 (44.736Mbps) or E3 (34.368Mbps) coax to fiber converter, and is available as a compact unmanaged standalone unit or a managed chassis plug-in module. The iConverter T3/E3 can be used to connect to devices such as PBXs, multiplexers, routers and video servers via fiber. The iConverter T3/E3 media converters operate in pairs, extending distances over fiber.

The T3/E3 supports both standard, CWDM and DWDM Small Form Pluggable (SFP) transceivers, enabling adaptability to different fiber types, distances and wavelengths, providing maximum flexibility across a variety of network architectures and topologies.

The T3/E3 also supports multimode and single-mode dual fiber with ST, SC and LC connectors; and single-mode single-fiber with SC connectors.

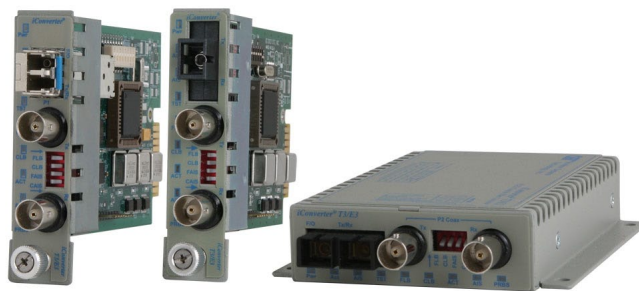
The T3/E3 features extensive local and remote loopback user-selectable diagnostic modes. Local loopback facilitates individual coax or fiber loopback operations. Remote loopback facilitates setting a remote T3/E3 converter to loopback mode, in order to test the integrity of the fiber and the remote converter, eliminating the cost of external hardware or support personnel at each end of the link.

Additional diagnostic features include forcing of all 1s data patterns, Alarm Indication Signal (AIS), to the coax or fiber interfaces and generating and monitoring a Pseudo Random Bit Sequence (PRBS) per ITU O.151 specification. These diagnostic features combined with the informative and easy-to-read LED display facilitate quick installation, fault detection, isolation and correction.

iConverter T3/E3 media converters are available as compact, unmanaged standalone units, or chassis plug-in modules that can be managed with a Management Module (NMM2) or Network Interface Device (NID) installed in the chassis. The management module provides access to all the advanced features on the module.

The T3/E3 standalone models are available with an external AC to DC power adapter or with a 2-pin terminal connector for direct connection to DC power. The standalone module can be wall/rack mounted with the integrated mounting brackets or DIN rail mounted with an optional DIN rail mounting clip (8251-0).

The hot-swappable plug-in module can be mounted in a high-density 19 or 5-Module chassis with redundant AC and DC power supplies. It can also be mounted in a 2-Module or in a 1-Module chassis with AC or DC power input.



SFP not included

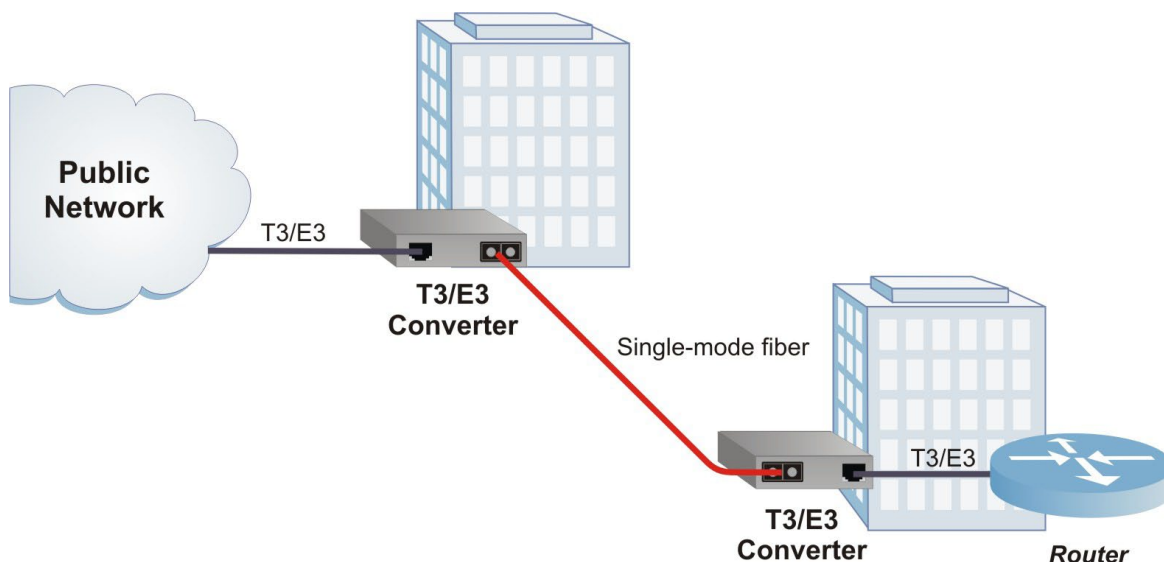
### KEY FEATURES

- T3 (DS3) or E3 Coax to fiber media converter
- Supports B3ZS and HDB3 line codes
- Supports framed or unframed and channelized or unchannelized data
- Supports RG-59 75 ohms coax interface with short-haul and long-haul build-out options
- Features user-selectable local and remote loopback modes and Force 1s (AIS) to Coax and Fiber
- Supports multimode and single-mode dual fiber with ST, SC and LC connectors; and single-mode single-fiber with SC connectors
- Supports Small Form Pluggable (SFP) transceivers with standard, CWDM and DWDM wavelengths
- LED displays status of each port
- Modules are hot-swappable and can be used in the 19-Module, 5-Module, 2-Module or 1-Module chassis
- Management is available with the addition of a management module to the chassis
- SNMP management via NetOutlook® provides real-time port and module status information, remote parameter configuration and trap notification
- Commercial (0 to 50°C) and wide (-40 to 60°C) temperature range
- Made in the USA
- Lifetime Warranty and free 24/7 Technical Support

# APPLICATION DIAGRAM

T3/E3 media converter provides a cost-effective solution for extending telecom demarcation points. A pair of T3/E3 converters is used to extend the demarcation between

buildings via fiber. Multimode or single-mode fiber can be used, and fiber links can be extended up to 120km using single-mode fiber.



## SPECIFICATIONS

Description	<i>iConverter</i> T3/E3 T3/E3 Managed Media Converter	
Data Rates	T3: E3:	44.736Mbps 34.368Mbps
Standard Compliances	ANSI: T1.102, T1.107, T1.404, T1-404a (T3) ITU: G.703, (E3), G.751, O.151 ETSI: EN 300 689, 300 686, 300 687	
Regulatory Compliances	UL, CE, FCC Class A	
Environmental	RoHS, WEEE, REACH	
Port Types	Coax: Fiber:	T3/E3 (BNC) Dual fiber ST, SC, LC and SFP Single-fiber SC and SFP
Cable Types	Coax: Fiber:	RG-59 Coax, 75 ohm; DS3: 380m, E3: 440m Multimode: 50/125µm, 62.5/125µm Single-mode: 9/125µm
MTBF (hrs)	Plug-in: Standalone w/o Adapter: Standalone w/ US Adapter: Standalone w/ Uni. Adapter:	480,000 490,000 250,000 100,000

AC Power Requirements	AC Adapter: (US)	100 - 240VAC/50 - 60Hz 0.05A @ 120VAC
	AC Adapter: (Universal)	100 - 240VAC/50 - 60Hz 0.05A @ 120VAC
DC Power Requirements	DC Input: (Backplane)	3.3VDC, 0.7A @ 3.3VDC
	DC Input: (Terminal Block)	5 - 32VDC, 0.3A @ 9VDC 2-Pin Terminal (non-isolated)
	DC Input: (AC Adapter)	5 - 32VDC, 0.3A @ 9VDC 2.5mm Barrel Connector
Dimensions W x D x H	Plug-in:	0.85" x 4.5" x 2.8" (21.6 mm x 114.3 mm x 71.1 mm)
	Standalone:	3.8" x 4.8" x 1.0" (96.5 mm x 121.9 mm x 25.4 mm)
Weight	Plug-in:	8 oz. (226.8 grams)
	Standalone w/o Adapter:	1.0 lb. (453.6 grams)
	Standalone w Adapter:	1.5 lbs. (680.4 grams)
Temperature	Commercial:	0 to 50°C
	Wide:	-40 to 60°C
	Storage:	-40 to 80°C
Humidity	5 to 95% (non-condensing)	
Altitude	-100m to 4,000m	
Warranty	Lifetime warranty with 24/7/365 free Technical Support	

# ORDERING INFORMATION

Fiber Type	Distance	Connector Types				Tx / Rx Lambda (nm)	Min. Tx Power (dBm)	Max. Tx Power (dBm)	Min. Rx Power (dBm)	Max. Rx Power (dBm)	Min. Attenuation (dB)	Link Budget (dB)
		ST	SC	LC	SFP							
-	-	-	-	-	8759-0-pt	-	-	-	-	-	-	-
MM/DF	5km	8740-0-pt	8742-0-pt	8746-0-pt	-	1310 / 1310	-23	-12	-31	-12	-	8
SM/DF	30km	8741-1-pt	8743-1-pt	8747-1-pt	-	1310 / 1310	-15	-8	-31	-8	-	16
SM/DF	60km	8741-2-pt	8743-2-pt	8747-2-pt	-	1310 / 1310	-5	0	-31	-3	3	26
SM/DF	120km	-	8743-3-pt	8747-3-pt	-	1550 / 1550	-5	0	-31	-3	3	26
SM/SF <sup>1</sup>	20km	-	8750-1-pt	-	-	1310 / 1550	-15	-5	-30	-3	-	15
SM/SF <sup>1</sup>	20km	-	8751-1-pt	-	-	1550 / 1310	-15	-5	-30	-3	-	15
SM/SF <sup>1</sup>	40km	-	8750-2-pt	-	-	1310 / 1550	-8	0	-30	-3	3	22
SM/SF <sup>1</sup>	40km	-	8751-2-pt	-	-	1550 / 1310	-8	0	-30	-3	3	22

<sup>1</sup> When using single-fiber (SF) media converter models, the Tx wavelength on one end has to match the Rx wavelength on the other.

MM = Multimode, SM = Single-mode, DF = Dual Fiber, SF = Single-fiber

**Base Model Number: 87xx-x-pt**

Select the model from ordering table above.

Add power option (p) and operating temperature range (t) to the model type selected.

**Power Options (p):**

<leave blank> = Plug-in module

**D** = Barrel Connector and AC/DC Power Adapter, 100-240VAC, 50-60Hz, with US power cord with integrated mounting brackets

**F** = Direct DC input, 2 pin terminal connector, no AC/DC power adapter, with integrated mounting brackets

**E** = Barrel Connector and Universal AC/DC Adapter, 100-240 VAC, 50-60Hz, No Power Cord, with integrated mounting brackets

**Operating Temperature Options (t):**

<leave blank> = Commercial temperature (0 to 50°C)

**W** = Wide temperature (-40 to 60°C)

Contact Omnitron for other configurations and extended temperature (-40 to 75°C) models.

Order the appropriate Fast Ethernet SFPs separately. [Visit the Omnitron Optical Transceivers web page.](#)

For chassis options, see [iConverter Chassis Overview web page.](#)

Model Number	Description
8251-0	DIN-Rail Mounting Clips
8260-0	19" 1U Rack Mount Shelf for Standalone Modules (up to 4 converters)