# *iConverter* X21 X.21 Serial to Fiber Media Converter

The *iConverter* X21 serial-to-fiber media converter supports X.21 and RS-530 applications featuring several configuration modes to enable connections with a wide variety of X.21 and RS-530 devices.

The X21 supports demanding applications where security, and performance are critical. The X21 provides the reliability and connectivity features necessary for enterprise and military applications, including controlling radar installations from remote distances.

The X21 can auto-detect and configure itself to match the baud rate of the connected device up to 8.192Mbps. The X21 supports standard DCE-sourced timing and terminal timing. An adapter cable is included to accommodate different gender connectors.

The X21 features local loop-back configuration to facilitate quick link testing and installations.

Fixed-fiber connectors are available with multimode dual-fiber, single-mode dual-fiber and single-mode single-fiber options. They support ST, SC and LC connectors with distances up to 5km over multimode fiber, 120km over single-mode fiber and 40km over single-fiber. The Small Form Pluggable (SFP) model supports a variety of transceiver types.

The *iConverter* X21 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.

As a standalone unit, the X21 is available as a tabletop or wall-mount unit. The tabletop model can be DIN-rail mounted using an optional DIN-rail mounting kit. Both the tabletop and the wall-mount models are DC powered and are available with an external AC/DC power adapter or a terminal connector for DC power.



SFP not included

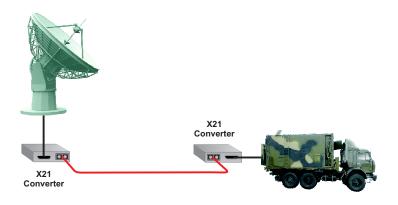
## **KEY FEATURES**

- X.21 and RS-530\* Serial to Fiber media converter
- Auto-configuration of baud rates
- DCE-sourced or terminal clock modes
- Supports serial data rates up to 8.192Mbps
- Included adapter cable used to provide desired serial interface gender
- Features Small Form Pluggable (SFP) transceivers or ST, SC and LC fixed-fiber connectors
- Supports multimode and single-mode dual-fiber and single-mode single-fiber
- Extends network distances up to 120km
- Features local loop-back for easy testing of fiber and serial interfaces
- Management is available with the addition of a management module to the chassis
- SNMP management via  $NetOutlook^{\circledR}$  provides realtime 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
- Tabletop or wall-mount standalone units
- Lifetime Warranty and free 24/7 Technical Support

<sup>\*</sup>Supports RS-530 DCE and DTE co-directional timing, Tx and Rx data, and two control lines.

#### APPLICATION DIAGRAM

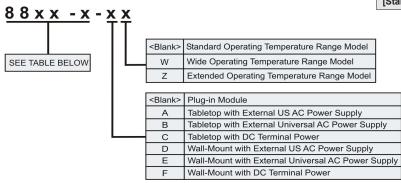
The Converter X21 serial to fiber converter provides a secure and safe environment for controlling high security or hazardous environments by extending the distance between locations up to 120km over single-mode fiber.



#### **SPECIFICATIONS**

Туре	X21					
Protocols	Serial X.21					
Copper Connectors	High-Density 15 Pin Female DB-15 male and female adapters are included					
Fiber Connectors	ST, SC, LC, SFP					
Controls	DTE/DCE, Clock Modes, Loop-Back					
Dimensions	Plug-in: Standaone: Wallmount:	W:0.85" x D:4.5" x H:2.8" W:3.1" x D:4.8" x H:1.0" W:3.8" x D:4.8" x H:1.0"				
Weight	Plug-in: Standalone:	8 oz. 1 lb				
Compliance	UL, CE, FCC Class A					
Power Requirement (typical)	Plug-in: Standalone:	0.5A @ 3.3VDC 5-32VDC 0.3A @ 9VDC				
Temperature	Standard: Wide: Storage:	0 to 50° C -40 to 60° C -40 to 80° C				
Humidity	5 to 95% (non-condensing)					
Altitude	-100m to 4000m					
MTBF (hrs) without power adapter	Plug-in: Standalone:	500,000 510,000				
MTBF (hrs) with power adapter [Standalone]	US: Universal:	250,000 100,000				

## ORDERING INFORMATION



Туре	Distance	Connector Type			Tx	Rx	Min. Tx	Max. Tx	Min. Rx	Max. Rx	Min.	Link	
		ST	sc	LC	SFP [nm]	[nm]	Power [dBm]	Power [dBm]	Power [dBm]	Power [dBm]	Attenuation (dB)	Budget [dB]	
-	-	-	-	-	8859-0	-	-	-	-	-	-	-	-
MM/DF	5km	8840-0	8842-0	8846-0		1310	1310	-24	-14	-31	-14	-	7
SM/DF	30km	8841-1	8843-1	8847-1		1310	1310	-15	-8	-31	-8	-	16
SM/DF	60km	8841-2	8843-2	8847-2		1310	1310	-5	0	-31	-3	3	26
SM/DF	120km	-	8843-3	8847-3		1550	1550	-5	0	-31	-3	3	26
SM/SF	20km	-	8850-1	-		1310	1550	-15	-5	-30	-3	-	15
SM/SF	20km	-	8851-1	-		1550	1310	-15	-5	-30	-3	-	15
SM/SF	40km	-	8850-2	-		1310	1550	-8	0	-30	-3	3	22
SM/SF	40km	-	8851-2	-		1550	1310	-8	0	-30	-3	3	22

For wide temperature (-40 to 60° C), add a "W" to the end of the model number. Consult factory for extended temperature (-40 to 75° 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.

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091-8840-001G 12/12



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