

FC1X00

E1 G.703 (BNC/RJ45) to
Fibre Converters



- Low cost E1 fibre extender
- BNC and RJ45 switch selectable E1 connections
- External Alarm relay port
- Minimal configuration of unit needed
- Compact unit & integral power supply
- Used in pairs across the link
- Rack mounting kits for 2 or 18 units available

FC1X00

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FC1000 rear view

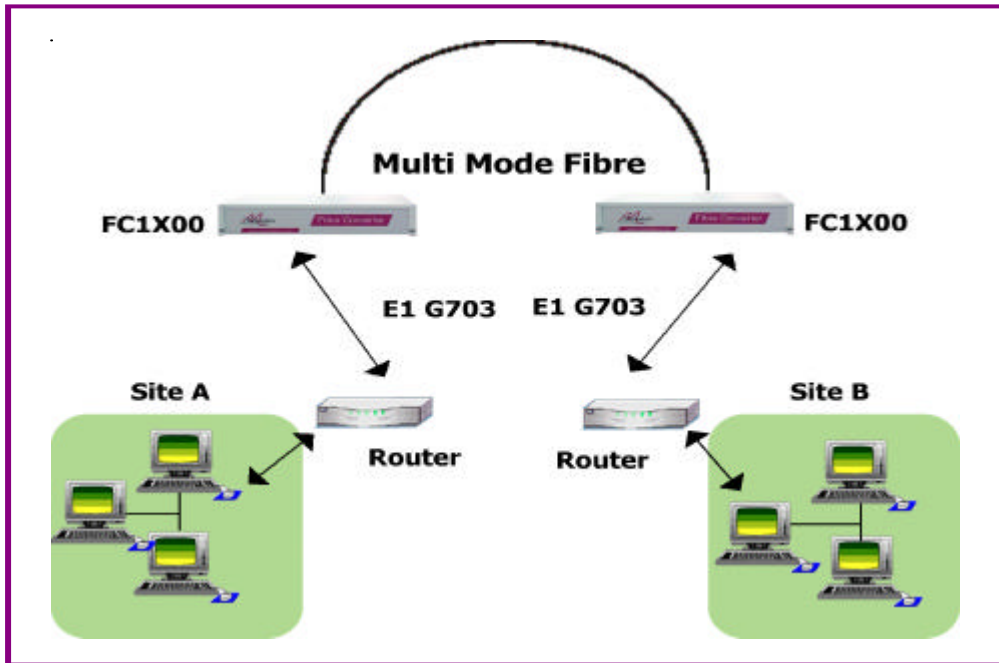
The FC1X00 models provide a new level of price/ performance for extending an E1 G.703 signal over a pair of single-mode or multi-mode fibres. The FC1X00 will extend both voice (PBX) and data (Router at G.703 or via an X.21 interface converter) over several kilometres. The three FC1X00 models provide single mode short haul, single mode long haul or multi-mode fibre interfaces using SC connectors. The E1 interface uses either a pair of BNC connectors or a single RJ45 connector. The FC1X00 provides a clear channel or unchannelised E1 path over the fibre. This means that the signal can be either framed or unframed.

There is a choice of integrated power supplies at 100-250 VAC or -48 VDC. Optional rack-mounting kits are available for up to 2 or 18 units.

About Metrodata

Founded in 1989 and based near London's Heathrow airport, Metrodata is a leading designer and manufacturer of datacommunications hardware for Fixed line, Satellite, Enterprise and Carrier networks. Specialising in interoperability and interconnectivity, Metrodata offers a range of Standard, Niche and System Integrated type products. These include Media converters, Interface converters, Fibre converters, Ethernet extenders and ATM switching and Circuit emulation products. Other specialist products manage high data rates and clock sensitive applications to ensure higher network performance. Metrodata provides COTS products to the commercial, government and defence sectors, as well as developing turnkey products to specific customer requirements. For more information and data on Metrodata products, visit our web site at www.metrodata.co.uk

Application Diagram



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Specifications

Single-mode Short-haul Line Interface		Line E1 Electrical Interface	
Interface	Dual SC single mode 8/125 um	Port	G.703, 75 ohm unbalanced
Tx power	-8 dBm to -15 dBm		120 ohm balanced
Max Rx input power	-8 dBm	Interface	BNC (75 ohm), RJ45 (120 ohm)
Rx sensitivity	-8 to -31 dBm	Line coding	HDB3
Optical loss budget	-15 - (-31) = 16 dB	Bit Rate	2.048 Mbps +/- 50 ppm
100-250 VAC Mains	FC1100 Part No: 80-05-918	Barrier	Fully barriered per EN41003
-48 VDC Supply	FC1100 Part No: 80-21-918	Cable lengths	RG59 = 600 m
			UR202 = 750 m
Single-mode Long-haul Line Interface		Environment	
Interface	Dual SC single mode 8/125 um	Temp	0 - 50 deg C
Tx power	0 dBm to -5 dBm	Humidity	0 - 95% RH, non-condensing
Max Rx input power	-8 dBm (may need attenuator)	Pressure	86-106 KPA
Rx sensitivity	-8 to -34 dBm		
Optical loss budget	-5 - (-34) = 29 dB	Power supply options	
100-250 VAC Mains	FC1200 Part No: 80-05-919	-48VDC Supply	-40 to -72 VDC, 200 - 100mA
-48 VDC Supply	FC1200 Part No: 80-21-919	AC Mains	100-250 VAC, 50-60 Hz, 60 - 25mA, IEC connector
		Power Consumption	6 watts approx when operating
Multi-mode Fibre Interface		Packaging	
Interface	Dual SC multi-mode 62.5/125 um	Type	Modem, 1U high without feet
Tx power	-14 to -19 dBm	Dimensions	W x Dx H mm
Max Rx input power	-14 dBm	Rackmount	202 x 132 x 44 (without feet)
Rx sensitivity	-14 to -30 dBm	Tabletop	202 x 132 x 48 (with feet)
Optical loss budget	-19-(-30) = 11dB	Rackmount kits Model No	
100-250 VAC Mains	FC1000 Part No: 80-05-910	1U 2 unit AC or DC	80-05-256
-48 VDC Supply	FC1000 Part No: 80-21-910	Recessed profile kit	
		6U 18 unit AC Mains	80-05-250
		6U 18 unit DC supply	80-05-255
Compliance & Approvals			
Performance	PD7024 (NTR4)		
Safety	EN41003, EN60950		
EMC	EN55022, EN50082		

For more data on Metrodata products and services, visit our website at www.metrodata.co.uk
 Metrodata reserves the right to change specifications without notice.
 Please check when ordering.

