

FC3X00

E3/DS-3 G.703 BNC to
Fibre Converters

- Low cost E3/DS-3 fibre extender
- Switch select between E3/DS-3
- 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



FC3000 rear view

The FC3X00 models provide a new level of price/ performance for extending an E3/DS-3 G.703 signal over a pair of single-mode or multi-mode fibres. The FC3X00 will extend E3/DS-3 over several kilometres.

The three FC3X00 models provide single mode short haul, single mode long haul or multi-mode fibre interfaces using SC connectors. The E3/DS-3 interface uses a pair of BNC connectors. The FC3X00 provides a clear channel or unchannelised E3/DS-3 path over the fibre. This means that the signal can be either framed or unframed.

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

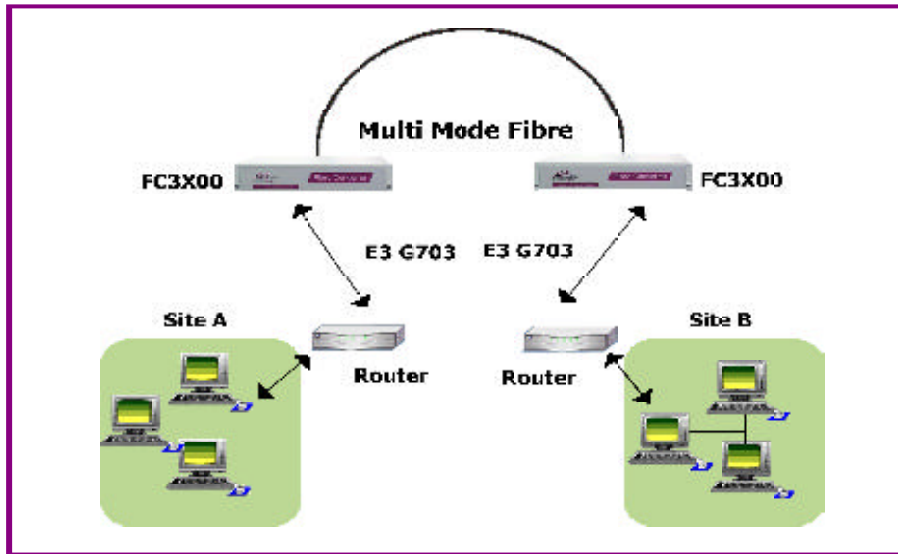
About Metrodata

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



FC3X00
datasheet

Application Diagram



Specifications

Single-mode Short-haul Line Interface		Line E3/DS-3 Electrical Interface	
Interface	Dual SC single mode 8/125 um	Port	G.703, 75 ohm unbalanced
Tx power	-8 dBm to -15 dBm	Interface	BNC (75 ohm),
Max Rx input power	-8 dBm	Line coding	E3: HDB3, DS-3: B3ZS
Rx sensitivity	-8 to -31 dBm	E3 Bit Rate	34.368 Mbps +/- 20 ppm
Optical loss budget	-15 - (-31) = 16 dB	DS-3 Bit Rate	44.736 Mbps +/- 20 ppm
100-250 VAC Mains	FC3100 Part No: 80-05-921	Barrier	Fully barriered per EN41003
-48 VDC Supply	FC3100 Part No: 80-21-921	E3 Cable lengths	
Single-mode Long-haul Line Interface		DS-3 Cable lengths	
Interface	Dual SC single mode 8/125 um	RG59 = 150 m	RG59 = 120 m
Tx power	0 dBm to -5 dBm	UR202 = 180 m	UR202 = 150 m
Max Rx input power	-8 dBm (may need attenuator)	Environment	
Rx sensitivity	-8 to -34 dBm	Temp	0 - 50 deg C
Optical loss budget	-5 - (-34) = 29 dB	Humidity	0 - 95% RH, non-condensing
100-250 VAC Mains	FC3200 Part No: 80-05-922	Pressure	86-106 KPA
-48 VDC Supply	FC3200 Part No: 80-21-922	Power supply options	
Multi-mode Fibre Interface		-48VDC Supply	-40 to -72 VDC, 200 - 100mA
Interface	Dual SC multi-mode 62.5/125 um	100-250 VAC Mains	100-250 VAC, 50/60 Hz,
Tx power	-14 to -19 dBm		60 - 25mA, IEC connector
Max Rx input power	-14 dBm	Power Consumption	6 watts approx when operating
Rx sensitivity	-14 to -30 dBm	Packaging	
Optical loss budget	-19-(-30) = 11dB	Type	Modem, 1U high without feet
100-250 VAC Mains	FC3000 Part No: 80-05-920	Dimensions	W x Dx H mm
-48 VDC Supply	FC3000 Part No: 80-21-920	Rackmount	202 x 132 x 44 (without feet)
Compliance & Approvals		Tabletop	202 x 132 x 48 (with feet)
Safety	EN41003, EN60950	Guideline distance based on 1300nm wavelength	
EMC	EN55022, EN50082	MM	2 - 5 kms
Operating Wavelengths		SM SH	15 - 40 kms
Standard	1300nm / 1310nm	SM LH	40 - 70 kms
Custom Request	850nm, 1550nm	Rackmount kits	
		1U 2 unit AC or DC	Recessed profile kit 80-05-256
		6U 18 unit AC mains	80-05-250
		6U 18 unit DC supply	80-05-255



FC3X00

datasheet

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.

