

FC4X00

155 Mbps STM-1
BNC to Fibre Converters



FC4X00

datasheet

- Low cost 155.52 Mbps Fibre to BNC converter
- Ideal for connecting 2 ATM switches on an SDH network
- Converts optical signals to BNC electrical for transmission over an SDH network
- External Alarm relay port
- Short & Long Haul Single-mode and Multi-mode fibre
- Compact unit with integral power supply
- Easy to install & maintain
- Rack mounting kits for 2 or 18 units available



FC4000 rear view

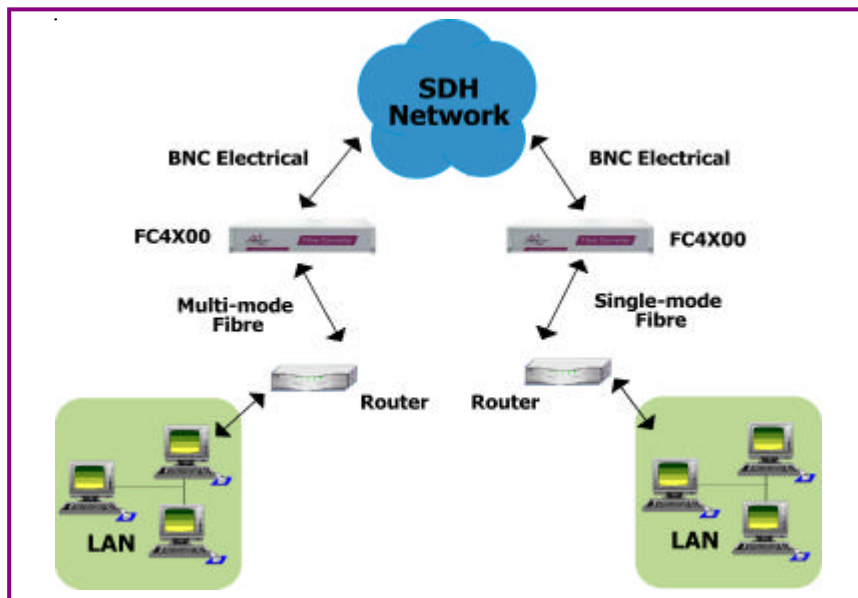
The FC4X00 provides a new level of price/performance for interacing between an STM-1/OC3 electrical interface and an STM-1/OC-3 fibre interface (single-mode or multi-mode). The FC4X00 is payload transparent.

The FC4X00 fibre interface uses the SC connector, whilst the electrical interface uses a pair of BNC connectors. The FC4X00 provides a clear STM-1/OC3 path over the fibre, which means that the signal can be either framed or unframed and all protocols are transported transparently.

There is a choice of 100-250 VAC or -48 VDC integrated power supplies. Rack mounting kits are available for 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



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Specifications

Application diagram

Multi-mode Fibre Interface		STM-1 Electrical Interface	
Port	G.957	Port	G.703
Interface	Dual SC multi-mode 62.5/125 um	Interface	Dual BNC (75 ohm)
Bit Rate	155 Mbps +/- 15ppm	Line coding	CMI
Tx power	-14 to -19 dBm	Bit Rate	155 Mbps +/- 15ppm
Max Rx input power	-14 dBm	Barrier	Fully barriered per EN41003
Rx sensitivity	-14 to -30 dBm	Cable lengths	RG59 = 70m UR202 = 80m
Optical loss budget	-19-(-30) = 11dB	Compliance & Approvals	
100-250 VAC Mains	FC4000 Part No: 80-05-915	Safety	EN60950
-48 VDC Supply	FC4000 Part No: 80-21-915	EMC	EN55022, EN50082
Single-mode Short Haul Fibre Interface		Environment	
Port	G.957	Temp	0 - 50 deg C
Interface	Dual SC single mode 8/125 um	Humidity	0 - 95% RH, non-condensing
Bit Rate	155 Mbps +/- 15ppm	Pressure	86-106 KPA
Tx power	-8 dBm to -15 dBm	Power supply options	
Max Rx input power	-8 dBm	-48VDC Supply	-40 to -72 VDC, 125 - 65mA
Rx sensitivity	-8 to -31 dBm	100-250 VAC Mains	100-250 VAC, 50/60 Hz, 45-20 mA, IEC connector
Optical loss budget	-15 - (-31) = 16 dB	Power Consumption	4.5 watts approx when operating
100-250 VAC Mains	FC4100 Part No: 80-05-916	Packaging	
-48 VDC Supply	FC4100 Part No: 80-21-916	Type	Modem, 1U high without feet
Single-mode Long Haul Fibre Interface		Dimensions	W x Dx H mm
Port	G.957	Rackmount	202 x 132 x 44 (without feet)
Interface	Dual SC single mode 8/125 um	Tabletop	202 x 132 x 48 (with feet)
Bit Rate	155 Mbps +/- 15ppm	Guideline distance based on 1300 nm wavelength	
Tx power	0 dBm to -5 dBm	MM	2 - 5 kms
Max Rx input power	-8 dBm (may need attenuator)	SM SH	15 - 40 kms
Rx sensitivity	-8 to -34 dBm	SM LH	40 - 70 kms
Optical loss budget	-5 - (-34) = 29 dB	Rackmount kits Model No	
100-250 VAC Mains	FC4200 Part No: 80-05-917	1U 2 unit AC or DC	Recessed profile kit 80-05-256
-48 VDC Supply	FC4200 Part No: 80-21-917	6U 18 unit AC mains	80-05-250
Operating Wavelengths		6U 18 unit DC supply	80-05-255
Standard	1300nm / 1310nm		
Custom Request	850nm, 1550nm		

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

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