

FC2X00

Single-mode to multi-mode Fibre Converter



FC2X00
datasheet

- Operates at any speed up to 155 Mbps
- Simple single-mode to multi-mode conversion
- Use instead of expensive single-mode router interfaces
- Low cost fibre interfacing
- External Alarm relay port
- Zero configuration required - just plug & go
- Compact unit with integral power supply
- Easy to install & maintain
- Rack mounting kits for 2 or 18 units available



FC2000 rear view

The FC2X00 provides a new level of price/performance in connecting switches and routers to carriers' single-mode fibres. The FC2000 connects to short haul fibre, whilst the FC2500 connects to long haul fibre.

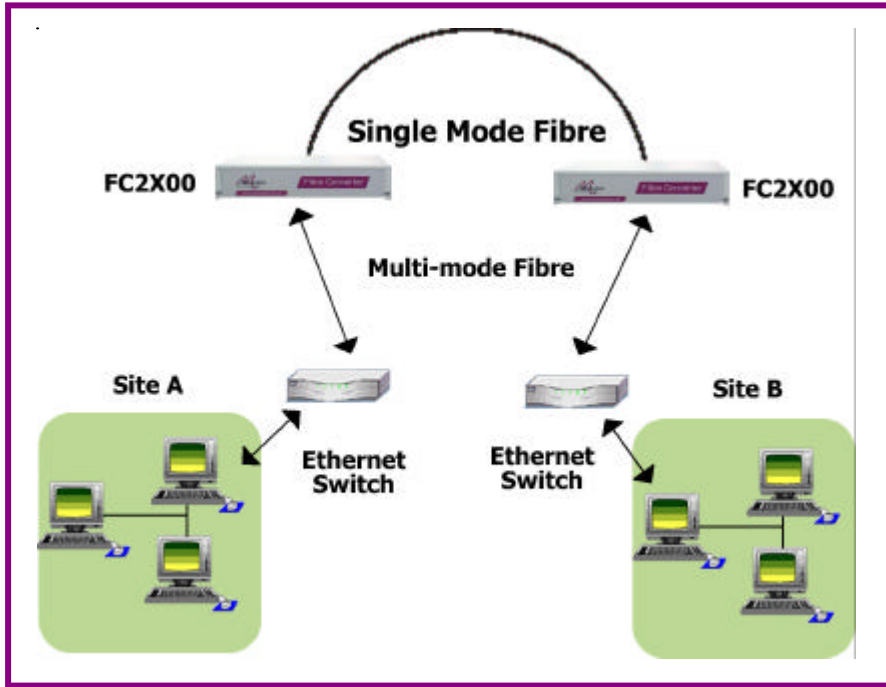
Connecting a switch or router to single-mode fibre usually requires the use of an expensive single-mode interface. The FC2X00 spans the gap between the multi-mode interfaces commonly available for use within a building and the single-mode fibre used for connection to the local exchange. The FC2X00 offers a pair of dual SC interfaces, an LED for status checking and requires no configuration. The unit operates automatically at the received data rate which can be any speed up to 155Mbps.

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

Application Diagram



Site to site connection of Ethernet switches with multi-mode interfaces linked via FC2X00 units & single-mode fibre

Specifications

Single-mode Short haul Line Interface		Multi-mode Customer Interface	
Interface	Dual SC single mode 8/125 um	Interface	Dual SC multi-mode 62.5/125 um
Bit Rate	Up to 155 Mbps	Bit Rate	Up to 155 Mbps
Tx power	-8 dBm to -15 dBm	Tx power	-14 to -19 dBm
Max Rx input power	-8 dBm	Max Rx input power	-14 dBm
Rx sensitivity	-8 to -31 dBm	Rx sensitivity	-14 to -30 dBm
Optical loss budget	-15 - (-31) = 16 dB	Optical loss budget	-19-(-30) = 11dB
100-250 VAC Mains	FC2000 Part No: 80-05-911	Power supply options	
-48 VDC Supply	FC2000 Part No: 80-21-911	-48VDC Supply	-40 to -72 VDC, 100-50 mA
Single-mode Long Haul Line Interface		AC Mains	100-250 VAC, 50/60 Hz, 35-15 mA, IEC connector
Interface	Dual SC single mode 8/125 um	Power Consumption	3.5 watts approx when operating
Bit Rate	Up to 155 Mbps	Packaging	
Tx power	0 dBm to -5 dBm	Type	Modem, 1U high without feet
Max Rx input power	-8 dBm (may need attenuator)	Dimensions	W x Dx H mm
Rx sensitivity	-8 to -34 dBm	Rackmount	202 x 132 x 44 (without feet)
Optical loss budget	-5 - (-34) = 29 dB	Tabletop	202 x 132 x 48 (with feet)
100-250 VAC Mains	FC2500 Part No: 80-05-912	Guideline distance based on 1300 nm wavelength	
-48 VDC Supply	FC2500 Part No: 80-21-912	MM	2 - 5 kms
Compliance & Approvals		SM SH	15 - 40 kms
Safety	EN60950	SM LH	40 - 70 kms
EMC	EN55022, EN50082	Rackmount kits Model No	
Environment		1U 2 unit AC or DC	Recessed profile kit 80051-256
Temp	0 -50 deg C	6U 18 unit AC mains	80-05-250
Humidity	0 - 95% RH, non-condensing	6U 18 unit DC supply	80-05-255
Pressure	86-106 KPA		
Operating Wavelengths			
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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