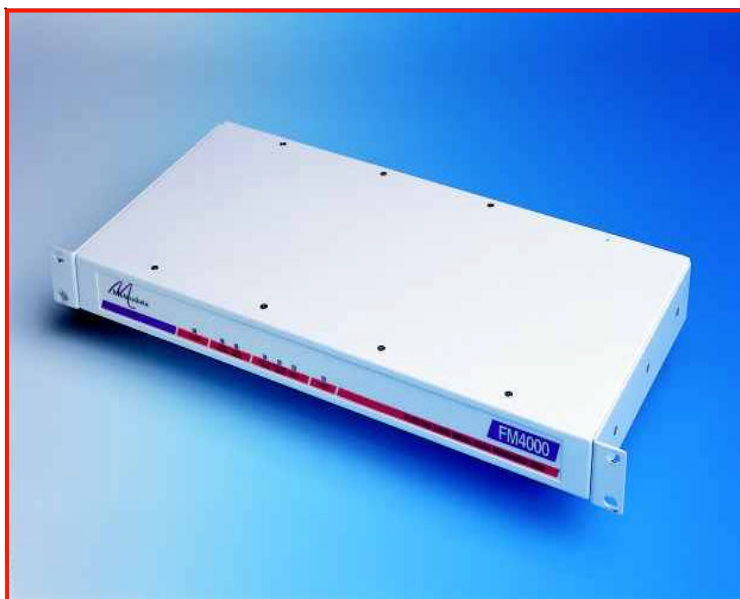


FM4000

E1 (n*64k) G.703/G.704
X.21/ V.35 Converter



- High Spec E1 G.703 2.048 Mbps interfacing
- Fractional E1 by allowing n*64Kbps channels
- X.21 or V.35 ports
- External Alarm relay port
- Remote configuration and testing of units across the network
- Comprehensive performance monitoring of both device and line
- Optional SNMP management
- Optional -48 volt DC supply



datasheet **FM4000**

The Metrodata FM4000 DSU is used to interface high performance DTE equipment such as bridges or routers to 2.048 Mbps E1 services. The fractional E1 service is allocated on an n*64Kbps basis. The DTE equipment may present an X.21 or a V.35 interface. FM4000s are used in pairs with one unit at either end of the Wide Area link. Error conditions and usage statistics are gathered and stored by the FM4000. Unit set-up is done via a comprehensive menu system which is accessed via a local or remote terminal. The optional Metrodata LM1100 SNMP Enabler permits management via a LAN using an SNMP system.

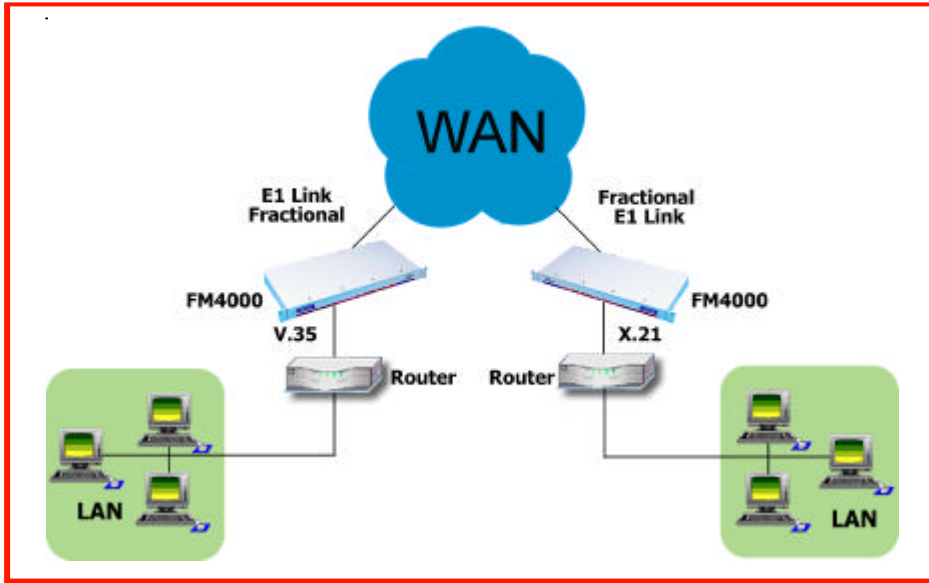
About Metrodata

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



FM4000

Application Diagram



FM4000

datasheet

Specifications

Line E1 Interface		Status LED & Diagnostics	
Port	G.703, 75 ohm unbalanced, 120 ohm balanced	Loopbacks	Local loop, Remote loop
Framing Interface	G.704 (CRC4 or No CRC4) or Unframed BNC (75 ohm), RJ45 (120 ohm)	BERT	2 ¹⁵ -1 PRBS
Line coding	HDB3	Statistics	Per G.821, 15min, 24 hour totals
Bit rate	2.048 Mbps +/- 50ppm	Major Alarms	LOS, LOF, SQ
Cable length	E1 BNC RG59 = 600m E1 BNC UR202 = 750m E1 RJ45 Belden 8132 = 175m E1 RJ45 Belden 9841 = 300m	Minor Alarms	AIS, RAI
		Data	DTE Tx Data, DTE Rx Data, DTE fault
		Test	Test via menu, Test LED on front panel
DTE Interface		Compliance & Approvals	
Port	X.21 or V.35	Performance	G.703, G.704., G.706, G.823
Interface	X.21: ISO4903, 15-way D type V.35: ISO2593, 34-way M-rack	BNC version	OTR.001 2DS, BAPT# NS/4043I/i/P/603813
Bit Rate	n*64Kbit/s, n = 1 to 31, or 2.048Mbps	RJ45 version	CTR12, CTR 13, BAPT# AA606631
		Safety	EN41003, EN 60950
		EMC	EN55022, EN50082
		Statistics	G.821, AT&T 54016:15 min, 24hr totals
		Management	RFC1213 (MIB II), RFC1495 (telnet), RFC1157 (SNMP), RFC1406 (DS1/E1), MetroDte MIB (DSU), RFC1215 (Traps)
Configuration & Management		Environment	
Type	Menu driven	Temp	0 - 50 deg C
Access	System console, telnet, SNMP	Humidity	0 - 95% RH, non-condensing
Interface	V.24, Ethernet 10baseT via RJ45	Pressure	86 - 106 KPA
Security	Access by 2-level password		
System	Non-volatile set-up	Packaging	
Clock modes	Internal, E1 loop or DTE (CCITT cct 113)	Type	1U, 19 inch rackmount
		Dimensions	435 x 213 x 44 mm (W x D x H)
Power supply			
AC Mains	100-250 VAC, 50-400 Hz, 50mA		
-48 VDC Supply	-36 to -72 VDC, 200-100mA		

FM4000 Part Numbers	DTE X.21 E1 Line: BNC	DTE: V.35 E1 Line: BNC	DTE: X.21 E1 Line: RJ45	DTE: V.35 E1 Line:RJ45
AC Mains:100-250 VAC	80-05-005	80-05-006	80-05-007	80-05-008
DC Power: -48 VDC	80-21-005	80-21-006	80-21-007	80-21-008

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

