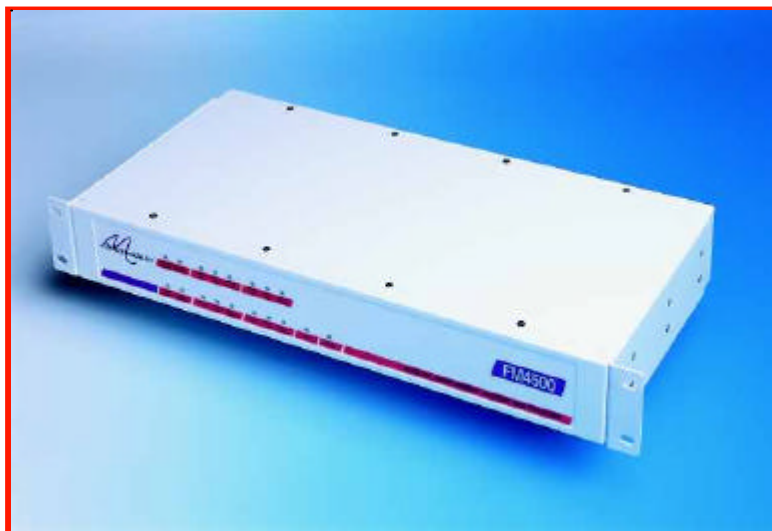


FM4500

E1 (n*64k) G.703/G.704
Drop / Insert Multiplexer



- Mix Voice and Data on the same leased line
- High Spec E1 G.703 2.048 Mbps interfacing
- Four Data ports and One E1 Drop port
- 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 integrated -48 volt DC supply



datasheet FM4500

The Metrodata FM4500 DSU is used as a drop/insert multiplexer to mix voice and data traffic on a single E1 2.048 Mbps link. The FM4500 provides a fractional E1 n*64Kbps port for the PABX equipment, and remaining E1 service bandwidth may be allocated to the four X.21 or V.35 ports to carry traffic to or from bridges or routers.

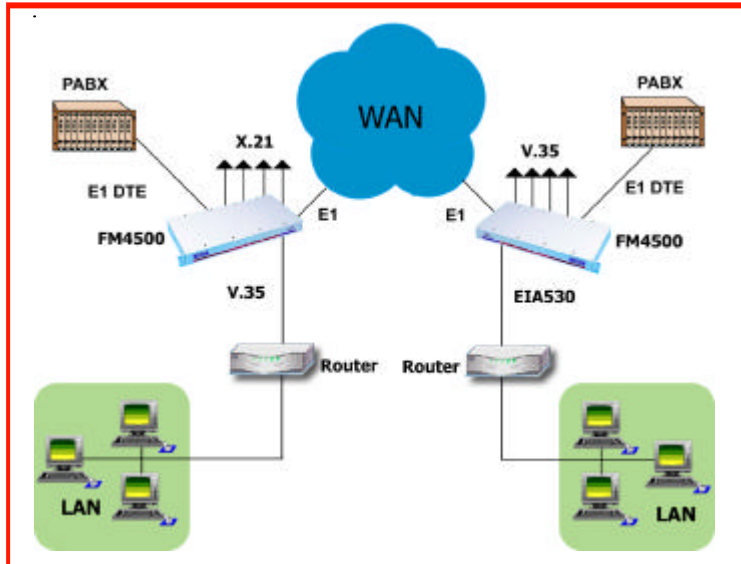
FM4500s are used in pairs with one unit at either end of the Wide Area link. Error conditions and usage statistics are gathered and stored by the FM4500. Unit set-up is done via a comprehensive menu system which is accessed via a local or remote terminal. The optional Metrodata LM1100 SNMP Enabler permits management via a LAN using an SNMP system. There is a choice of 100-250 VAC or -48 VDC integrated power supplies.

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



FM4500

datasheet

Specifications

Line E1 Interface		Status & Diagnostics	
Port	G.703, 75 ohm unbalanced, 120 ohm balanced	Loopbacks	Local loop, Remote loop
Framing	G.704 (CRC4 or No CRC4)	Statistics	Per G.821, 15min, 24 hour totals
Interface	BNC (75 ohm), RJ45 (120 ohm)	Major Alarms	LOS, LOF, SQ for Line E1 & DTE E1
Line coding	HDB3	Minor Alarms	AIS, RA I for Line E1 & DTE E1
Bit rate	2.048 Mbps +/- 50ppm	Data	DTE Tx Data, DTE Rx Data, DTE fault (x4)
Cable length	E1 BNC RG59 = 600m	Test	Test via menu, Test LED on front panel
	E1 BNC UR202 = 750m	Compliance & Approvals	
	E1 RJ45 Belden 8132 = 175m	Performance	G.703, G.704., G.706, G.823
	E1 RJ45 Belden 9841 = 300m	BNC version	OTR.001 2DS, BAPT# NS/4043/I/P/604060
DTE Interface		RJ45 version	CTR12, CTR 13, BAPT# 606272
Port	X.21 or V.35	Safety	EN41003, EN 60950
Interface	X.21: ISO4903, 15-way D type	EMC	EN55022, EN50082
	V.35: ISO2593, 34-way M-rack	Statistics	G.821, AT&T 54016:15 min, 24hr totals
Bit Rate	n*64Kbps, n =1 to 31	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	Packaging	
System	Non-volatile set-up	Type	1.5 U, 19 inch rackmount
Line E1 timing	Internal, DTE (CCITT cct 113) or Through	Dimensions	435 x 213 x 65 mm (W x D x H)
DTE timing:		Power supply	
Transmit:	Line Rx, Internal,DTE (cct 113)	AC Mains	100-250 VAC, 50-400 Hz, 50mA
Receive:	Line Rx, DTE (cct 113)	-48 VDC	-36 to -72 VDC, 200-100mA

FM4500 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	80-05-009	80-05-010	80-05-011	80-05-012
DC Power: -48 VDC	80-21-009	80-21-010	80-21-011	80-21-012
LM1100 SNMP Enabler	All models: 14-02-139			

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.

