

- LAN extension over up to 4x Clear-Channel or Fractional E1 or T1 services
- Use either for individual Point-to-Point links, offering seamless Ethernet bandwidth over up to 4 'bonded' WAN circuits between two locations, or as a small Central Site Aggregator, serving combinations of single and/or bonded E1 or T1 links to between one and four separate locations
- Four RJ45 plus single SFP flexible media port, offering local Switched Ethernet connections up to 1Gbps
- Fully manageable via Serial Terminal (user-friendly context-sensitive menu system), Telnet/SSH, SNMP and Web Browser. TACACS+ for secure Management authentication
- Carrier Ethernet OAM protocol support, for Connectivity Management
- Integrated 'Bit Error Rate Testing' (BERT) for WAN link verification and troubleshooting
- 802.1q VLAN support with prioritisation based on 802.1p and/or DSCP markers
- Bandwidth control per Ethernet Port and Priority queue (also for Broadcast traffic), enabling differentiated traffic QoS
- RSTP support
- Integral auto-sensing AC (110V-250V) or -48VDC PSUs
- 'Zero-touch' installation with remote proxy management option for ease-of-use
- Link Loss alarm Forwarding



WCM1400 Managed LAN Extender over up to 4x E1 or T1 circuits

The WCM1400 is a member of the MetroCONNECT family, offering Managed LAN extension over either Clear-Channel or Fractional E1 or T1 Wide Area Networks. The WCM1400 supports four locally switched RJ45 LAN interfaces, three of which are for 10/100Mbps connections and the fourth supporting 1Gbps. A further LAN interface is provided via an SFP port, offering the flexibility of a wide variety of fibre interface options. Over-sized Ethernet frames are supported.

Ethernet VLANs are supported, either by pass-through of existing Tags or by the Push and Pop of Tags on ingress and egress at Ethernet ports. Pre-embedded prioritisation schemes can be honoured, or alternatively prioritisation can be over-written under Management control. Bandwidth limitation per port and per prioritisation can be implemented, providing a mechanism for differentiated QoS for different services. Management is offered via each of Serial Terminal connection, Telnet, SNMP or Web Browser application. Management security is offered via SSH and TACACS+ authentication. Support is also offered for 'Carrier Ethernet' Link OAM Management (IEEE 802.3ah), enabling status information to be shared with connected equipment if required.

In line with all other members of the MetroCONNECT Ethernet Service Delivery family, the WCM1400 supports Metrodata's 'zero-touch' installation process, eliminating the need for skilled resources for remote-site installations.

MetroCONNECT WCM1400

Managed LAN Extender over up to 4x E1 or T1 circuits

The WCM1400 supports integrated 'Bit Error Rate Testing' (BERT), an invaluable aid during both installation and subsequent troubleshooting. This facility enables integrity testing of the WAN link, prior to application of Ethernet traffic, eliminating doubt as to the location of connectivity problems.

Ethernet traffic is encapsulated by the WCM1400, for transmission over an E1 or T1 link, using a number of optional schema including support for the ITU-T G.8040 standard 'Generic Framing Procedure' (GFP). The product can be used for Point-to-Point links, using two WCM1400 products joined via multiply 'bonded' terrestrial or wireless (e.g. microwave) WAN services, to provide seamless Ethernet bandwidth of up to ~8Mbps between two locations. Alternatively, the product can be used in conjunction with other members of the MetroCONNECT product family, including the WCM1100, WCM1800, WCM1820 and MC12000 Ethernet Service Delivery Chassis. As a small 'Central Site' aggregator, the WCM1400 may serve combinations of single and/or bonded WAN links to between one and four separate locations.

Specifications

WCM1400 Subscriber Port Specs		WCM1400 WAN Port Specs	
Port	3x 10/100baseT & 1x 1000baseT ports with auto-negotiation	Mode	4 ports of E1 or T1
Interface	RJ45 (Auto Crossover MDI/MDIX)	Presentation	E1 120 ohm RJ45, T1 100 ohm RJ45
Operating modes	Auto Negotiate, 10M, 100M, 1000M Full Duplex, Half Duplex	Line Rate	E1 2.048 Mbps, T1 1.544 Mbps
LEDs	Link Activity, Speed	Timing	Internal or loop
1000Base-X Fibre Interface		Encapsulation	HDLC, GFP G.8040 LCAS G.7042, VCAT G.7043
Port	IEEE802.3z 1000Base-X SFP	Compliance & Approvals	
Interface	Dual LC	Safety	EN60950, IEC-60825-1 (Class I Laser Eye Safety)
SFP 1000Base SX		EMC	EN55032
Wavelength	850nm Multimode	Environment	
Max Rx input power	0 dBm	Temp	0 to 50 deg C
Rx sensitivity	-17 to 0 dBm	Humidity	0 - 95% RH, non condensing
Optical loss budget	7.5dB (550m)	Pressure	86 - 100 KPa
Tx power	-9.5 to -3 dBm	Storage Temp	-40 to 100 deg C
SFP 1000Base LX		Power supply	
Wavelength	1300nm Singlemode	-48VDC	-36 to -72VDC, 125 - 65mA
Max Rx input power	0 dBm	AC Mains	100 - 250 VAC
Rx sensitivity	-17 to 0 dBm		50 - 60 Hz, 60 - 25mA
Optical Loss budget	9.5dB (10km)	Power consumption	15 watts approx when operating
Tx power	-9.5 to -3 dBm	Packaging	
		Type	1U 19 inch rackmount
		Dimensions	435 x 213 x 44 (W x D x H)

Order codes

Product	100 - 250 VAC	-48 VDC
WCM1400	80-70-4542	80-71-4542
SFP 1000baseSX	80-31-011	80-31-011
SFP 1000baseLX	80-31-031	80-31-031