MetroCONNECT WCM1800

Managed LAN Extender over up to 8x E1 or T1

- LAN extension over up to 8x Clear-Channel or Fractional El or Tl services
- Use either for individual Point-to-Point links, offering seamless Ethernet bandwidth over up to 8 '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 IGbps
- 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

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- 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



WCM1800 Managed LAN Extender over up to 8x E1 or T1 circuits

The WCM1800 is a member of the MetroCONNECT family, offering Managed LAN extension over either Clear-Channel or Fractional E1 or T1 Wide Area Networks. The WCM1800 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 WCM1800 supports Metrodata's 'zero-touch' installation process, eliminating the need for skilled resources for remote-site installations.

The WCM1800 supports integrated 'Bit Error Rate Testing' (BERT), an invaluable aid during both installation and subsequent

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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 WCM1800, 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 WCM1800 products joined via multiply 'bonded' terrestrial or wireless (e.g. microwave) WAN services, to provide seamless Ethernet bandwidth of up to ~16Mbps between two locations. Alternatively, the product can be used in conjunction with other members of the MetroCONNECT product family, including the WCM1100, WCM1400, WCM1820 and MC12000 Ethernet Service Delivery Chassis. As a small 'Central Site' aggregator, the WCM1800 may serve combinations of single and/or bonded WAN links to between one and four separate locations.

Specifications

WCM1800 Subscriber Port Specs				
Port	3x 10/100baseT & 1x 1000baseT ports			
	with auto-negotiation			
Interface	RJ45 (Auto Crossover MDI/MDIX)			
Operating modes	Auto Negotiate, I0M, I00M, I000M			
	Full Duplex, Half Duplex			
LEDs	Link Activity, Speed			
1000Base-X Fibre Interface				
Port	IEEE802.3z 1000Base-X SFP			
Interface	Dual LC			
SFP 1000Base SX				
Wavelength	850nm Multimode			
Max Rx input power	0 dBm			
Rx sensitivity	-17 to 0 dBm			
Optical loss budget	7.5dB (550m)			
Tx power	-9.5 to -3 dBm			
SFP 1000Base LX				
Wavelength	1300nm Singlemode			
Max Rx input power	0 dBm			
Rx sensitivity	-17 to 0 dBm			
Optical Loss budget	9.5dB (10km)			
Tx power	-9.5 to -3 dBm			

WCM1800 WAN Port Specs			
Mode	8 ports of El or Tl		
Presentation	EI 120 ohm RJ45,		
	T1 100 ohm RJ45		
Line Rate	EI 2.048 Mbps,TI 1.544 Mbps		
Timing	Internal or loop		
Encapsulation	HDLC, GFP G.8040		
	LCAS G.7042,VCAT G.7043		
Compliance & Approvals			
Safety	EN60950, IEC-60825-I		
	(Class I Laser Eye Safety)		
EMC	EN55032		
Environment			
Тетр	0 to 50 deg C		
Humidity	0 - 95% RH, non condensing		
Pressure	86 - 100 KPa		
Storage Temp	-40 to 100 deg C		
Power supply			
-48 VDC	-36 to -72 VDC, 125 - 65mA		
AC Mains	100 - 250 VAC		
	50 - 60 Hz, 60 - 25mA		
Power consumption	20 watts approx when operating		
Packaging			
Туре	IU 19 inch rackmount		
Dimensions	435 x 213 x 44 (W x D x H)		

Order codes

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Product	100 - 250 VAC	-48 VDC
WCM1800	80-70-8542	80-71-8542
SFP 1000baseSX	80-31-011	80-31-011
SFP 1000baseLX	80-31-031	80-31-031

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datasheet WCMI800