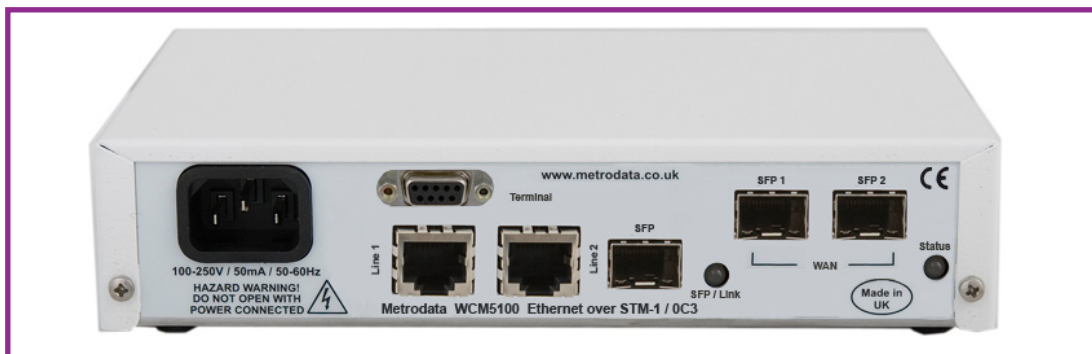


- LAN extension over SDH STM-1 and Sonet OC-3 services (with resilient SFPs)
- VC4 EoSDH, Up to 3xVC3 EoSDH, Up to 3xE3/DS3 EoPoS encapsulations supported
- GFP framing with VCAT and LCAS support
- Dual RJ45 plus single SFP flexible media port, offering local Switched Ethernet connections up to 1Gbps
- Link state forwarding
- Jumbo Frame Support (10kbyte)
- 802.3ah OAM Support, with IP proxy over OAM mode
- 802.1q VLAN support (pass-through and tag switching)
- 802.1p priority queuing (4 queues)
- RSTP Support
- SSH & TACACS+ for secure authentication
- Telnet & SNMP Management (Local & Remote)
- Extensive Statistics & Performance monitoring
- Integral auto-sensing AC (110V-250V) or -48VDC PSUs
- 'Zero-touch' installation facility with advanced IP proxy management option for ease-of-use



WCM5100 Managed LAN Extender over STM-1 / OC-3

The WCM5100 is a member of the MetroCONNECT family, offering Managed local Ethernet Switching at up to 1Gbps and LAN extension over STM-1 and OC-3 services. The WCM5100 supports auto negotiation and auto MDI/MDI-X cross-over switching on two RJ45 LAN interfaces. A further LAN interface is provided via an SFP port, offering either an additional RJ45 connection or a variety of multi-mode and single-mode fibre interface options. Dual SFP ports are also provided for the STM-1 / OC-3 port offering flexibility of optical connection.

Link State Forwarding is supported, whereby faults on both of the uplink ports will automatically force a link down on the user ports to indicate to the attached devices that there is a link problem. The transmission of Jumbo frames is supported, with internal packet buffering used to smooth out bursty traffic without packet loss.

Ethernet Link OAM (802.3ah) is supported, enabling the Ethernet service to be managed and monitored right up to the customer delivery point. Forthcoming software developments will add support for LACP, 802.1ag and Y.1731 OAM standards.

In line with all other members of the MetroCONNECT Ethernet Service Delivery family, the WCM5100 supports Metrodata's 'zero-touch' installation process, minimising both on-site installation time and the Engineering skills required. Our unique 'IP proxy over OAM' functionality reduces on-site installation to a 'plug and play' exercise, simply checking that Ethernet link-up LEDs indicate correct physical connectivity. Comprehensive Telnet and/or SNMP remote management is available to the device via an IP proxy process across Layer-2 OAM traffic from an MCI2000 Service Delivery chassis or another MetroCONNECT family device at the network centre, with no need for layer-3 (IP) parameters to be assigned locally. If required, individual configuration can be subsequently downloaded via TFTP.

MetroCONNECT WCM5100

Managed LAN Extender over SDH STM-1 / Sonet OC-3

The WCM5100 supports VLAN in two ways. In normal mode, VLAN tagged frames are passed unmodified; however when VLAN support is enabled, the WCM5100 supports VLAN tag-based switching whereby access may be controlled using VLAN IDs. The unit is password protected for Telnet access for security, and for SNMP is configured with a primary and multiple back-up NMS stations. SNMP access will only be accepted from an authorised NMS.

Specifications

WCM5100 Subscriber Port Specs		WCM5100 WAN Port Specs	
Port	2x 10/100/1000baseT port with auto-negotiation and Jumbo frame support	Mode	SDH STM-1 or Sonet OC-3
Interface	RJ45 (Auto Crossover MDI/MDIX)	Interface	Dual SFP ports each with dual LC connectors
Operating modes	Auto Negotiate, 10M, 100M, 1000M Full Duplex, Half Duplex	Framing	STM-1 or OC-3
LEDs	Link Activity, Speed	Line Coding	NRZ
1000Base-X Fibre Interface		Bit Rate	155.52Mbps +/- 15ppm
SFP Port	IEEE802.3z 1000Base-X	Mapping	GFP with VCAT & LCAS (G.7041, G.7042)
Interface	Dual LC	Encapsulation	VC4 EoSDH, Up to 3xVC3 EoSDH, Up to 3xE3/DS3 EoPoS
SFP 1000Base SX		SFP 155Mbps Multimode	
Wavelength	850nm Multimode	Wavelength	1300nm multimode
Max Rx input power	0 dBm	TX Power	-22.5 to -14 dBm
Rx sensitivity	-17 to 0 dBm	Max RX input power	-14 dBm
Optical loss budget	7.5dB (550m)	Rx sensitivity	-31 to -14 dBm
Tx power	-9.5 to -3 dBm	Optical loss budget	8.5db (2km)
SFP 1000Base LX		SFP 155Mbps Singlemode	
Wavelength	1300nm Singlemode	Wavelength	1300nm singlemode
Max Rx input power	0 dBm	TX Power	-15 to -8 dBm
Rx sensitivity	-17 to 0 dBm	Max RX input power	-8 dBm
Optical Loss budget	9.5dB (10km)	Rx sensitivity	-28 to -8 dBm
Tx power	-9.5 to -3 dBm	Optical loss budget	13db (10km)
Compliance & Approvals		Environment	
Safety	EN60950, IEC-60825-1 (Class I Laser Eye Safety)	Temp	0 to 50 deg C
EMC	EN55022, EN50082	Humidity	0 - 95% RH, non condensing
Packaging & Dimensions (WxDxH mm)		Pressure	86 - 100 KPa
Type	Modem, 1U high without feet	Storage Temp	-40 to 100 deg C
Rackmount	202 x 132 x 44 (without feet)	Power supply	
Tabletop	202 x 132 x 48 (with feet)	-48VDC	-36 to -72VDC, 125 - 65mA
		AC Mains	100 - 250 VAC
			50 - 60 Hz, 60 - 25mA
		Power consumption	8 watts approx when operating

Order codes

Product	100 - 250 VAC	-48 VDC	SFP	Part Number
WCM5100	80-70-547	80-71-547	1Gbps MM 550m 850nm	80-31-011
1U 2 Unit Rackmount Kit	80-05-256	80-05-256	1Gbps SM 10km 1300nm	80-31-031
6U 18 unit Rackmount Kit	80-05-250	80-05-255	100/155Mbps MM 2km 1300nm	80-30-021
			100/155Mbps SM 10km 1300nm	80-30-031

datasheet WCM5100