

- LAN extension over up to 4x Clear-Channel or Framed E3/DS3 services
- Dual RJ45 plus 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
- Alarm Extension relay
- Integral auto-sensing AC (110V-250V) or -48VDC PSUs
- 'Zero-touch' installation facility with advanced IP proxy management option for ease-of-use



**WCM3400 Managed LAN Extender over up to 4x E3/DS3 circuits**

The WCM3400 is a member of the MetroCONNECT family, offering Managed local Ethernet Switching at up to 1Gbps and LAN extension over up to 4 off E3 / DS3 wide area links using VCAT. The WCM3400 supports auto negotiation and auto MDI/MDI-X crossover 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.

To ensure reliable operation, the WCM3400 supports LCAS whereby E3/DS3 links are automatically added and withdrawn from the VCAT group based on availability. Link State Forwarding is supported, whereby faults on ALL 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 WCM3400 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 MC12000 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 WCM3400

## Managed LAN Extender over up to 4x E3/DS3 services

The WCM3400 supports VLAN in two ways. In normal mode, VLAN tagged frames are passed unmodified; however when VLAN support is enabled, the WCM3400 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.

VLANs can also be used to select which site to forward user data to, e.g. when using a WCM3400 unit supporting four E3 ports at a central site with up to four WCM3100 and WCM3200 units each supporting up to two E3 ports at up to four remote sites.

### Compatibility:

GFP mode for use with LAN Extension Aggregation equipment.

## Specifications

| WCM3400 Subscriber Port Specs |  | WCM3400 WAN Port Specs |  |
|-------------------------------|--|------------------------|--|
| Port                          | 2x 10/100/1000baseT port with auto-negotiation and Jumbo frame support | Mode                   | 4 ports of E3 or DS3                               |
| Interface                     | RJ45 (Auto Crossover MDI/MDIX)   | Presentation           | E3 75 ohm dual mini BNC, DS3 75 ohm dual mini BNC  |
| Operating modes               | Auto Negotiate, 10M, 100M, 1000M Full Duplex, Half Duplex              | Line Rate              | E3 34.368Mbps<br>DS3 44.736Mbps                    |
| LEDs                          | Link Activity, Speed   | Timing                 | Internal or loop                                   |
| 1000Base-X Fibre Interface    |  | Encapsulation          | HDLC, GFP G.8040<br>LCAS G.7042, VCAT G.7043       |
| Port                          | IEEE802.3z 1000Base-X SFP  | Compliance & Approvals |  |
| Interface                     | Dual LC  | Safety                 | EN60950, IEC-60825-1<br>(Class I Laser Eye Safety) |
| SFP 1000Base SX               |  | EMC                    | EN55022, EN50082                                   |
| 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 -72 VDC, 125 - 65mA                         |
| Max Rx input power            | 0 dBm  | AC Mains               | 100 - 250 VAC<br>50 - 60 Hz, 60 - 25mA             |
| Rx sensitivity                | -17 to 0 dBm   | Power consumption      | 20 watts approx when operating                     |
| Optical Loss budget           | 9.5dB (10km)   | Packaging              |  |
| Tx power                      | -9.5 to -3 dBm   | Type                   | 1U 19 inch rackmount                               |
|                               |  | Dimensions             | 435 x 213 x 44 (W x D x H)                         |

## Order codes

| Product        | 100 - 250 VAC | -48 VDC    |
|----------------|---------------|------------|
| WCM3400        | 80-70-4543    | 80-71-4543 |
| SFP 1000baseSX | 80-31-011     | 80-31-011  |
| SFP 1000baseLX | 80-31-031     | 80-31-031  |

datasheet WCM3400