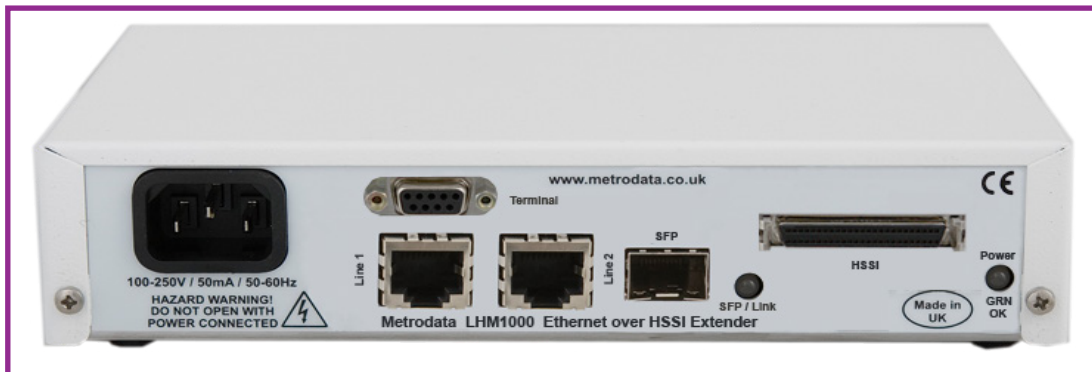


- LAN extension over HSSI Serial services
- Dual RJ45 plus single SFP flexible media port, offering local Switched Ethernet connections up to 1Gbps
- Link Loss Forwarding
- Jumbo Frame Support (10kbyte)
- 802.3ah OAM Support, with IP proxy over OAM mode
- 802.1q VLAN support (pass-through and tag switching)
- 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



LHM1000 Managed LAN Extender over HSSI Serial services

The LHM1000 is a member of the MetroCONNECT family, offering Managed local Ethernet Switching at up to 1Gbps and LAN extension over HSSI Serial wide area links. The LHM1000 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.

Link Loss Forwarding is supported, whereby an uplink fault 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.

In addition to Telnet and SNMP, Carrier Ethernet 'OAM' (Operations, Administration & Maintenance) standard protocols are supported, specifically IEEE 802.3ah (EFM) and IEEE 802.1ag (CFM), enabling these products to participate in, for example, Continuity Check and Alarm propagation domains which may have been established by an Ethernet Service Provider.

In line with all other members of the MetroCONNECT Ethernet Service Delivery family, the LHM1000 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.

Management is offered using OAM, SNMP or Telnet, either locally via any of the available subscriber ports or remotely over a WAN connection. With VLAN support enabled, management access is enabled individually on a per port basis to provide secure access to the unit.

The LHM1000 supports VLAN in two ways. In normal mode, VLAN tagged frames are passed unmodified; however when VLAN support is enabled, the LHM1000 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

LHM1000 Subscriber Port Specs		LHM1000 WAN Port Specs	
Port	2 x 10/100/1000baseT port with auto-negotiation and jumbo frame support	Interface	HSSI
Interface	RJ45 (Auto Crossover MDI/MDIX)	Presentation	50 way AMP
Operating modes	Auto Negotiate, 10M, 100M, 1000M	Line Rate	52Mbps (max)
LEDs	Full Duplex, Half Duplex Link Activity, Speed	Compliance & Approvals	
1000Base-X Fibre Interface		Safety	EN60950, IEC-60825-1 (Class I Laser Eye Safety)
SFP Port	IEEE802.3z 1000Base-X	EMC	EN55032
Interface	Dual LC	Environment	
SFP 1000Base SX		Temp	0 to 50 deg C
Wavelength	850nm Multimode	Humidity	0 - 95% RH, non condensing
Max Rx input power	0 dBm	Pressure	86 - 100 KPa
Rx sensitivity	-17 to 0 dBm	Storage Temp	-40 to 100 deg C
Optical loss budget	7.5dB (550m)	Power supply	
Tx power	-9.5 to -3 dBm	-48VDC	-40 to -72VDC, 125 - 65mA
SFP 1000Base LX		AC Mains	100 - 250 VAC 50 - 60 Hz, 60 - 25mA
Wavelength	1300nm Singlemode	Power consumption	6 watts approx when operating
Max Rx input power	0 dBm	Packaging & Dimensions (WxDxH mm)	
Rx sensitivity	-17 to 0 dBm	Type	Modem, 1U high without feet
Optical Loss budget	9.5dB (10km)	Rackmount	202 x 132 x 44 (without feet)
Tx power	-9.5 to -3 dBm	Tabletop	202 x 132 x 48 (with feet)

Order codes

Product	100 - 250 VAC	-48 VDC
LHM1000	80-70-544	80-71-544
1U 2 Unit Rackmount Kit	80-05-256	80-05-256
6U 18 unit Rackmount Kit	80-05-250	80-05-255
SFP	Part Number	
1Gbps MM 550m 850nm	80-31-011	
1Gbps SM 10km 1300nm	80-31-031	