

MetaLIGHT[®] 130



Profit from Copper™

The MetaLIGHT 130 is a high-density, cost-effective point-to-multipoint Ethernet in the First Mile (EFM) platform that delivers multiple high-performance, symmetrical Ethernet services, aggregating the traffic and services into a high-speed uplink to a backbone transport network. With its superior performance and low-cost, the MetaLIGHT 130 provides the best value to its users.

The MetaLIGHT 130 allows service providers and enterprises to use their existing copper infrastructure to deliver 1 to 40 Mbps Ethernet services to users within their service area or enterprise. It achieves unprecedented rate, reach and reliability on any grade of available copper, and installs within minutes, enabling immediate deployment of broadband services.

The MetaLIGHT 130 is interoperable with any standard backbone Ethernet switch/router and complements Metro Ethernet access nodes by expanding a single high-capacity port (e.g., Gig-E and/or 100Base-T) to multiple lower-rate, copper-fed customers. The MetaLIGHT 130 forms an EFM link with a peer MetaLIGHT 50 on 1 to 8 copper pairs.

The MetaLIGHT 130 optimizes the existing copper access network and reduces the cost and deployment time required to deliver high-performance broadband services. It enables a low-risk approach and dramatically improves ROI and user satisfaction. Because fiber trenching is not required with MetaLIGHT systems, capital expenditures to deliver broadband services are greatly reduced.

Based on standard EFM technology, the MetaLIGHT 130 aggregates 1 to 8 copper pairs together to create a High Speed Link™ (HSL™) which carries the users' traffic. Multiple HSL's can be supported per shelf. The transmission layer is additionally powered by elements of Actelis Networks' MetaLOOP[®] technology, such as Cross Talk Cancellation (CTC) and Cross Talk Management (CTM), which boost transmission rate, reach and reliability far beyond comparable systems, while retaining the standards compliance of G.SHDSL modems. It is fully compliant to the strictest global safety and emission standards.

The MetaLIGHT 130 can support present or future Ethernet Quality of Service (QoS) and Type of Service (ToS) requirements, and has the highest available packet throughput efficiency. It supports 802.1q VLAN-aware bridge functionality, double tagging ("Q-in-Q", VMAN) for end-user VLAN transparency, including four 802.1p priorities and wire-speed non-blocking Layer 2 bridging. Support for 802.3x is included for traffic management.

The MetaLIGHT 130 is graphically managed via the MetaASSIST™ EMS (element management system), or the MetaASSIST GUI craft application. Management interfaces include SNMP V2c standard MIBs for seamless integration with standard network management applications (e.g., HP OpenView) and command line interface (TL1). Both local and remote management via an IP network are supported, in either in-band or out-of-band modes.

Highlights

- Ethernet in the First Mile (EFM) Solution
- Rapid Service Deployment
- Superior Rate and Reach Beyond 18,000 ft/5.5 km
- Low Delay for Voice and Video
- Compliant with Worldwide Spectral Standards
- NEBS Level III, FCC, UL and CE Compliant
- Environmentally Hardened
- SNMP Management

Applications

- Transparent LAN Service
- Fast Internet Access
- Metro Ethernet Extension
- Private Campus Network Intra-Connection
- MDU/MTU
- DSLAM Backhaul
- WiFi Backhaul

Markets Served

- RBOC's, PTT's, Independent Operators, Competitive Operators
- Federal, State and Local Government Agencies
- Education, Health Care, Utilities, Campus

MetaLIGHT® 130



System Specifications

- Non-blocking Switching Fabric 3.4 Gbps
- Maximum Line Rate Per 8-Pair Link 40 Mbps symmetrical
- Low Delay 2-4 ms (typical)
- Cascading Capability 5 shelves
80 pairs

Product Specifications

Interfaces

Network Interfaces

- Ethernet 10/100 Base T 4
Auto-negotiating,
Auto-MDIX
Full/half duplex
- Connector Type RJ45 (front)
- Gig-E Optical Interface (optional) 1
• Connector Type MM 850 nm
SM 1310 nm
SFP LC duplex

High-Speed Link (HSL- Copper Pairs)

- Number of MLU Line Cards 1
- Maximum Number of Copper Pairs 16
- Number of Copper Pairs per HSL 1-8
- Connector Type 50-pin telco (rear)
- Spectral Compatibility ITU-T G.991.2,
G.SHDSL.bis,
ETSI TS 101 524,
ANSI T1.417,
Enhanced G.SHDSL
G.991.2
- Sealing Current

LAN Protocols

- Ethernet 802.3
- VLAN Tagging 802.1q
- Double Tagging (optional) Q-in-Q, VMAN
- Priorities (4 Queues) 802.1p
- Dynamic Bridging 802.1q, 4K MAC
addresses

Management Protocols

- SNMP V2c and V1
- Command Line Interface
- HTTP
- Connectivity: In-band and Out-of-band
- Optional Secured Access Through SSH2 Encrypted Sessions

Configuration and Monitoring

- MetaASSIST EMS
- MetaASSIST GUI Craft
- SNMP
- Command Line Interface
- Performance Statistics
- System Logs

Front Panel System LEDs

- Power
- Critical/major/minor
- Alarm Cutoff Button (ACO)/Lamp test (LMT)

Card LEDs

- Active
- Status

Ethernet Interface LEDs

- Active (ACT)
- Link (LNK)

Alarm Contacts

- DB15 and Wire-wrap (rear)

Physical

- Rack Mounting 19", 23" or ETSI racks
- Dimensions Height: 3.50" (2U) (88mm)
Depth: 11.0" (280mm) DC
12.0" (305mm) AC
Width: 17.4" (442mm)
- Weight 14.8 lb (6.7 kg)
- Plug-in Cards 2 horizontal, front loading
- Power DC -48/-60 V nominal, dual A+B
85 Watts for fully loaded system
Optional AC power 110/240 VAC

Regulatory Approval

Safety

- UL60950, CSA C22.2 60950
- EN 60950, IEC 60950

EMC

- FCC Part 15 Class A
- ICES-003 Class A
- ETSI EN300 386
- ETSI EN300 132

NEBS

- Level III (GR-1089-CORE, GR-63-CORE)

CE

- EMC and Safety

Environmental

- Operating Temp. -40° to +65°C
- Storage Temp. -40° to +70°C
- Relative Humidity Up to 95%, non-cond.
- GR-63-CORE
- ETSI ETS 300 019

For information regarding pricing and ordering options, please contact Actelis sales.



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