

ADSL/ ADSL2+ Mini DSLAM MD-15



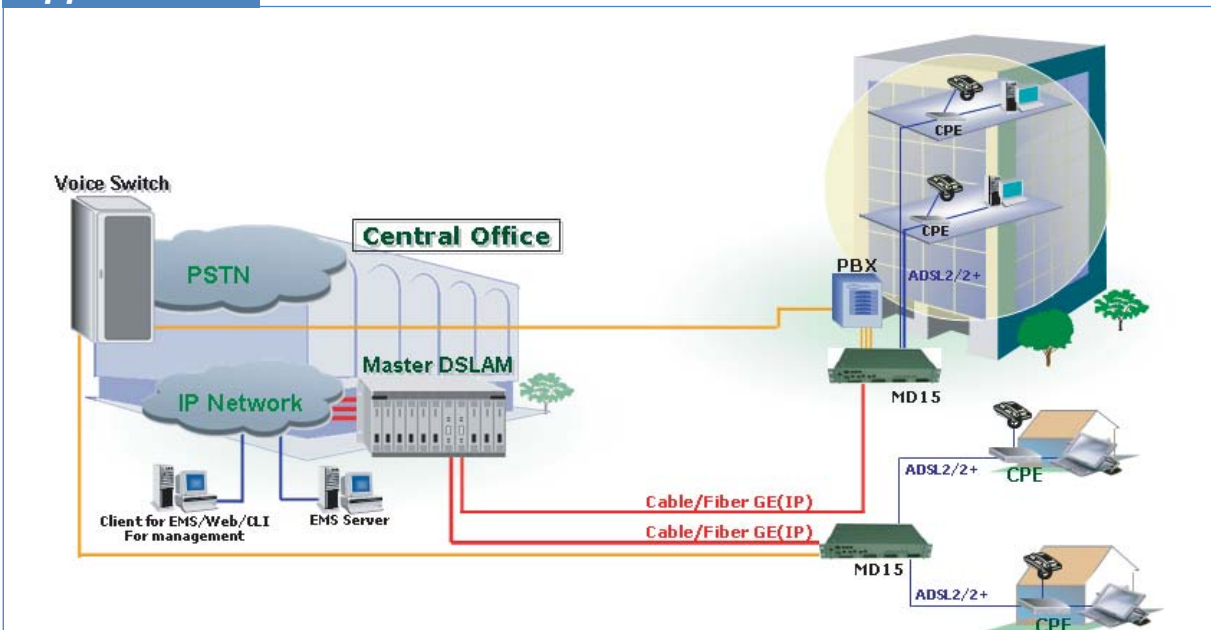
Digital Subscriber Line Access Multiplexer

The MD-15 is a 1.5U high box-type IP DSLAM with a rack-mountable enclosure. The system provides 24/48 ADSL2/2+ ports and is able to provide the broadband data communication services and multimedia services at the same copper line. The MD-15 is capable of delivering very high speed data service; full-rate of ADSL2+ for 48 subscribers with 2 Gigabit uplinks, or 10 Mbps per port for 96 subscribers in a two 48-port boxes stacking configuration. With advanced QoS features, MD-15 is ideal for next generation broadband network to deliver rich video contents, DSL, POTS, and VoIP service over ADSL2+ link. The MD-15 provides two uplink ports with both electrical and optical Gigabit Ethernet (GbE) interfaces. It contains a hot-swappable fan and dust filter. It is also suitable for small size application and can be easily deployed in remote location, for instance, remote terminal, business parks, street cabinets, etc;K to extend the service reach distance. The MD-15 can act as a Subtending-DSLAM or as a stand-alone DSLAM. Via supporting of 802.3ad link aggregation, UAMP 2110 extends the uplink bandwidth to 2 Gbps and increases the reliability of uplink by line protection feature of 802.3ad. The MD-15 also supports stacking configuration that several MD-15s can stacked up to provide services to more subscribers for one GBE uplink.

Features

- Highly compact solution that provides 24/48 ADSL2/2+ only by 1.5U space and stackable for higher port density
- Scalable solution that allow new revenue to be generated with minimum installation time and expense
- Equipped with fan and air filter, low power requirements plus full diagnostics and alarm reporting capability
- Standard-based with remote configuration and software upgrade that help service providers minimize daily operational costs
- Support multi-ADSL speed including ADSL, ADSL2, ADSL2+ via POTS/ISDN user interface
- Wide operating temperature range from -10°C ~ 65°C
- Provide two combo GBE trunk interfaces with both electrical (RJ-45) and fiber optical (SFP) ports
- Support Link Aggregation in IEEE 802.3ad that allows 2 GBE links to be aggregated together as a logical link.
- Support both LACP protocol (dynamic) for load sharing and failover in case of loss of Ethernet link
- User-friendly CLI, web-based GUI, and EMS (NMS) through in-band/out-band channels for carrying out the OAM&P of the system
- Support system software download via FTP for both local and remote terminals
- Support database export and import functionality via TFTP for configuration backup and restoration
- Support SNTP to automatically calibrate the time and date of the system
- Support on board thermal sensor to detect over temperature conditions with software configurable thresholds that generate SNMP traps and syslog alarm entries
- Provide SSH (Secure Shell) for more secure remote operation
- Meet CE requirement

Application



Specifications

Interface Cards

- Network Interface: 2 x 10/100/1000 Based-Tx or 2 x SFP(Mini-GBIC)
- Subscriber Interface: ADSL/ADSL2/ADSL2+/POTS/ISDN (G.992.1 .2 .3 .5)

Service Characteristics

- OSI Layer 2 Functionality
 - MAC filtering and count limit
 - Access control list (ACL)
 - Multicasting Support
 - Broadcast control and broadcast rate limit
 - Port-based and 802.1p/q Tag-based virtual local area network (VLAN)
 - IGMP v1/v2 snooping and Proxy
 - SNMP v1 and v2c
 - Remote Statistic (1, 2, 3, 9 groups)
- Ethernet:
 - IEEE 802.1d Spanning tree protocol (STP)
 - IEEE 802.3ad Link aggregation
 - Security on console access

Management

- Memory back-up
- Database export and import functionality Firmware upgradeable via FTP or TFTP
- RS-232 serial and Ethernet 10/100 port for local management
- NMS/EMS for Multiple Nodes Management based on SNMP (optional)

System Configuration

- Multiple-session TELNET
- Supports point-to-point VCC link
- Software remote upgrade

Performance Monitoring

- Monitors of line attenuation, noise margin, current rate, loss of signal, loss of framing loss of power and error second performance data.
- Provides 15-minute and 1-day counters for history record

Management Information Base (MIB)

- RFC 1213 SNMP MIB II
- RFC 1493 Bridge MIB
- RFC 1643 Ethernet MIB
- RFC 2674 Q MIB
- RFC 1757 RMON MIB, group 1,2,3,9
- ADSL Line MIB
- CTCU proprietary MIB

Certification

- ITU-T K.20
- ETSI 300-019, 300-386
- RoHS
- EN 60950
- Conform to CE requirements

Alarm and Status Surveillance

- Automatic alarm/LED indication for alarm and system status
- Maintenance signal for OAM functionality
- Four housekeeping inputs and One alarm contact closure outputs

Physical

- 1.5U: 66mm x 482mm x 265mm (HxWxD)
Weight: 4.4 Kg with no units installed, fan card 1.5U: 0.25 Kg

MTBF: 20150 Hours

Environment

- Operating Temperature: -10°C ~ +65°C
- Operating Relative Humidity: (Non-Condensing): 5% ~ 95%

Power Requirement

- Input: -48 V DC (-42 V to -56 V)
- Input: AC 100 VAC to 240 VAC is feasible in future release
- Dual A+B -48 V DC power input terminal

