

64 Port IP-DSLAM



Product ID : DS64-0208-64
Version : 1.0

Using the latest ADSL technology, **MACIL** offers IP-DSLAMs for service providers a very cost-effective solution for immediate implementation of multiple services in private and public networks.

Data is transmitted in ATM format in DSL transmission. Since the ATM backbone coverage is not available and is not economical, the MAC IP-DSLAMs uses IP back bone for Uplink. the IPDSLAM concentrates 64 ports of the ATM over ADSL traffic from the remote clients, and maps each user's data encapsulated in ATM-PVC to Ethernet-VLAN, and then uplink to Gigabit Ethernet.

The DSLAMs provides Ethernet-VLAN to ATM-PVC mapping feature for the ISP to isolate user data with security and to provide lots of service enhancement capabilities. MAC IP-DSLAMs supports 8 ATM PVC links for ADSL CPEs.



64 Port IP- DSLAM Card

In the front end,

1. One Dual color LED is provided for Healthy indication of the DSLAM.
2. There are 64 LEDs to indicate individual port status.
3. Two LEDs to indicate 1000Megabit Ethernet interface activity.
4. One 9-pin RS-232 console port for local management and a Reset Switch.

On the rear side,

1. One 96 Pin and one 48 Pin Euro Connectors (Male) have been provided for Interface to MDF Termination of ADSL Ports .
2. One 55Pin Hard metric connector is provided for Ethernet back plane connectivity and Power supply terminations.
3. Two RJ45 connectors for Ethernet Up-linking.

Features:

- VLAN support

The IP-DSLAMs supports Ethernet-VLAN to ATM-PVC feature. The service provider use this feature to protect the security of each ADSL CPE applicant, and to provide more differential service capabilities.

- Compact design for limited space

MACIL provides 64 Port IP-DSLAM in two variants.

- I. 64 Port IP-DSLAM in PIZZA Box Type
[width = 368mm, height=45mm, length = 378mm]

II. In Rack Type, DSLAMs occupy only 30.48mm space in the standard 19” Sub-Rack and can be equipped modularly. compactness is perfect for co-location and basement installation. The POTS splitters are accommodated in the termination panel (MDF)at the rear and service providers do not have to allocate extra space for POTS splitter shelves.

- The DSLAM's can be used for Aggregation of up to 512 ports and managed with single IP in conjunction with control and switch card in 1+1 Redundant configuration.
- Manageable and Cost Effective Expansion Design

MAC IP-DSLAMs are an independent 64port ADSL/ADSL2+ IP DSLAM for the very beginning service. As the number of users and applications increase, flexible design allows the Service provider to manage the MAC IP-DSLAMs via SNMP or Telnet, thus eliminating the need to add expensive Up-link Trunk.

Applications:

Because of the growth of Internet population, bandwidth becomes more and more important for people that live or work in the buildings. MAC IP-DSLAMs enables people inside the buildings to share the expensive up link bandwidth and moves the Internet point of presence (POP) into the buildings.

- IP -DSLAM application

MAC IP-DSLAMs can also be used to ISPs through Ethernet Switches and Routers, since the IP DSLAM s terminates ADSL ATM circuits and converts the traffic to Ethernet-VLAN tagged packets. All Ethernet-VLAN traffic goes directly to ISP internal Ethernet environment, then be routed to the Internet.

IP-DSLAM Supporting Elements





DSLAM Box Type - Front View



DSLAM Box Type - Rear View

Specifications:

Environment

- Operating Temperature: 0°C to +50°C
- Storage Temperature: -20°C to +85°C
- Operating Relative Humidity (Non-Condensing): 20% to 90%
- Storage Relative Humidity (Non-Condensing): 0%-95%

Electrical

- Supply Voltage/Current: -40V to -60V DC (Nom -48V), 100 watts max.
- MTBF: 72,500 hrs.

ADSL Interface Can be configured as

- G.992.1 (G.DMT)
- G.992.2 (G.Lite)
- G.992.3 (ADSL2)
- G.992.5 (ADSL2+)
- ANSI T1.413

Aggregate Ethernet Interface

- Uplink Interface : 10/100 /1000 Mbps Ethernet (2 Ports)
- Termination: RJ 45 Connector
- Ethernet Bridging as per 802.1D
- Priority Queuing as per 802.1P

- Ethernet Link Aggregation as per 802.3ad
- VLAN Support as per 802.1Q
- GARP/GVRP Support
- Multi cast Groups (Static Configuration)
- IGMP Snooping V2/V3
- Rate limiting Port wise
- Extensive QOS support

Network Management

- SNMP v2 implementation
- Telnet Support
- Network Management software supported include : SELT Application
- Individual Port Reset

Standards

- RFC2675 802.1P MIB
- RFC2674 802.1Q MIB for TCP/IP based Internet's.
- RFC 1757 – RMON MIB
- RFC 1213 – Management Information Base for Network
- Management of TCP/IP-based Internet's: MIBII