



Architecture

- Scalable, distributed, non-blocking IP fabric
- Multi Gbps switching
- Native Multicast management
- IGMP v1, v2 & v3
- 254 Multicast per shelf
- 511 Multicast per shelf (optional)
- 8 slots for Line Cards
- Internal redundant power module
- 1 fan tray with air filter, three fans (redundancy)
- Internal POTS splitter feature for ADSL2+ and VDSL2
- All slots are hot swappable
- Max port density:
 - 480 ADSL2+ ports
 - 384 VDSL2 ports@
 - 384 G.SHDSLbis ports@
 - 16x10/100/1000 BT Giga Ethernet ports
 - 8 optical Giga Ethernet ports
 - 2x10 Giga Ethernet ports (with optional IP switch)

Physical dimensions

- Size: 21" (12U) H x 19" W x 12" D
- 19" Rack and Wall mountable, or Stand Alone
- Weight: 40 Kg fully loaded
- Full front access

Power

- AC Input Voltage: 90-132/180-264VAC; 47/63 Hz auto ranging@
- -48V DC Input Voltage: -36V to -76V
- Max power consumption: 800 W
- Less than 1.2 W per DSL port
- Redundant and mergeable

Regulatory Compliance

- NEBS Level 3
- Bellcore @
- FCC (Part 15, Class A, Part 68)
- UL (Standards in UL-1459 & UL-1950)
- Canada CSA (C22.2 Nos. 950-M89 & 225-M90)
- Europe CENELEC/ETSI (IEC 555 & 801) TUV, CE

Environment

- Operating Temperature: 0°C to 50°C
- Relative Humidity: 10% to 90%, non-condensing
- Operating altitude: up to 3,000 meters
- Storage: -40° C to 70°C, 5% to 95% relative humidity
- MTBF: 65 000+ hours, MTTR: 0.5 hour

IP Capabilities

- Multi Gbps switching, non-blocking
- Bridging and routing
- Support for IPV4, IPV6@ and MPLS@
- Bridging Ethernet to Ethernet and Ethernet to ATM
- Routing and forwarding over ATM, RFC 1483/2684
- 4094 VLANs
- 4094 Virtual Circuits
- 15,000 MAC addresses
- VLAN 802.1P/Q
- IGMP v1 & v2 & v3 snooping
- Broadcast and Multicast with internal agent AVIcast™ for IP Multicast management in Video broadcast application
- PPPoE: 960 clients
- DHCP: 9,600 addresses, per port configuration
- Per flow WFQ

ATM Capabilities

- Multi Gbps switching, non-blocking
- ATM PVC support per ATM UNI 3.1 and 4.0 signalling
- ATM Shaping, support for CBR, VBR-rt, VBR-nrt, GFR & UBR traffic types
- AAL5 data & management transparency
- Configurable VPI/VCI range, up to 592 connections per system
- 8 VP/VC per ADSL port
- Early and partial packet discard
- Intelligent dynamic buffering architecture with per VP/VC queuing

Uplinks

- 16x10/100/1000 BT Giga Ethernet ports
- 8 MiniBIC port for MiniGBIC modules
- 2x10 Giga Ethernet ports (with optional IP switch)

Management and Services

- Ethernet 10BASE-T port
- Serial port for local craft interface (RJ-45)
- Support for Private and Public MIBs (RFC 1213, 1493, 2933, 3635, 3636)
- CLI through Serial port or Telnet

- Embedded HTTP server for configuration and management from standard Web browser
- SNMP V.1 and V.2 agent
- SSL/SSH encryption for secure management access
- Dual bank Flash memory for software upgrade
- Local and remote self-diagnostic testing
- Software and configuration download without service interruption
- System & Status LEDs
- Alarm & Event history
- Full port configuration
- Login authorization and security levels

Subscriber Links

- 60 ADSL2++ ports DMT cell relay / card
- Annexes A & B (optional Annex M) / card
- Two 64-pin CHAMP connectors / card
- Long Reach ADSL2: rates of 128 kbps up to 21 kft
- ADSL data rates (ITU-T G.992.1)
 - Downstream: 32 kbps to 10 Mbps
 - Upstream: 32 kbps to 1 Mbps
- ADSL G.lite data rates (ITU-T G.992.2)
 - Downstream: 32 kbps to 4 Mbps
 - Upstream: 32 kbps to 1 Mbps
- ADSL2+ data rates (ITU-T G.992.5)
 - Downstream: 32 kbps to 26 Mbps
 - Upstream: 32 kbps to 3 Mbps
- ADSL2++ data rates
 - Downstream: 32 kbps to 50 Mbps
 - Upstream: 32 kbps to 6 Mbps
- 48 VDSL2 ports DMT cell relay / card

POTS Splitters (option)

- Fully integrated ADSL POTS splitters
- Annexes A & B (optional Annex M)
- Two 64-pin CHAMP connectors for PBX connections / card
- Meets DC requirements in Annex 1.2 of T.413 Issue 2
- Meets Voice band requirements in Annex 1.3 of T.413 Issue 2
- Meets ADSL band requirements in Annex 1.4 of T.413 Issue 2

*A New Generation
DSLAM fit to
your needs*