Version 1.5

DSM5616

IP DSLAM AND MSAN MULTI SERVICE ACCESS NODE



ADSL2+

VDSL2

SHDSL

POTS ISDN

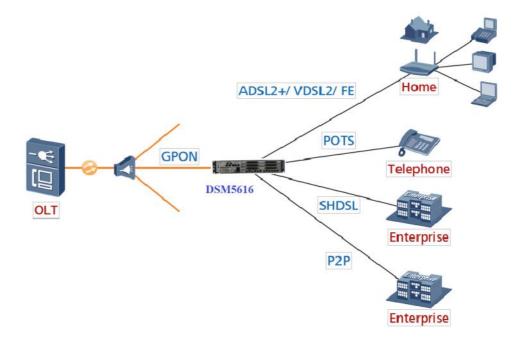
ETHERNET

Description

The DSM5616 is an industry-leading IP-DSLAM, MSAN or remote multi dwelling unit (MDU) launched, which supports flexible configurations and provides broadband services on Fiber To The Building (FTTB) and Fiber To The Curb (FTTC) networks. The DSM5616 is a box-type device measuring 2-U high and 19-inch wide and providing two GPON or GE uplink ports and ADSL2+, VDSL2, SHDSL, POTS, ISDN, FE and GE ports. The DSM5616 features a high access density, high processing capability, high reliability, easy maintenance, environment-friendlily and energy conservation, and future-oriented architecture design and can be used in corridors, cabinets, indoor, and outdoor usage scenarios.

Applications

The DSM5616 provides two GPON or GE uplink ports and provides multiple services by supporting flexible board configurations. The DSM5616 provides broadband, voice, and video services through ADSL2+/ VDSL2/FE boards, voices service through POTS boards, leased line services through SHDSL or P2P boards.





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Modular IP DSLAM and Multi Service Access Node

- High access density: DSM5616 supports a maximum of 256 POTS users, 128 ADSL2+ users, 192 VDSL2 users, or 64FE users. It supports 128 POTS users and 128 ADSL2+ users simultaneously by using a combo board.
- Flexible configurations: Service boards are slot compatible and different types of ports can be configured flexibly, improving the actual configuration ratio and meeting different customer requirements.
- Support for the combo board to improve the access density, reduce the space of the equipment room, and simplify cable routing complexity.
- Support for the P2P optical access board (4GE+4FE) to provide high bandwidth for valued customers.
- Support for 48-V backup power (lead-acid batteries and LiFePO4 batteries).
- Operable IPTV services: Strong service switching capability, packet forwarding capability, and high integration (data exchange and user management) enable the DSM5616 to have carrier-class multicast operation capability.
- Perfect voice features, supporting basic services (voice service, fax service, and modem service) and supplementary services (three-way calling, call waiting, call transfer, calling line identification presentation, and calling number restriction)

- Plug-and-play (PnP) service provisioning: The DSM5616 allows remote issuing of configuration. A management channel and service channel are created after the DSM5616 is powered on and registers successfully. Manual onsite configuration is not required.
- Efficient management and maintenance: free of field software commissioning, remote acceptance, remote upgrade and patch installation, and remote fault location.
- High reliability: The DSM5616 supports the working temperature from -40 to 65 C, 6 kV lightning protection, and corrosion-proof design of boards.
- Prudent security measures: The DSM5616 meets security requirements of telecom services to ensure system and user security.
- Environment-friendly and energy conservation: The DSM5616 uses a highly effective power supply system to reduce system power consumption. It uses an intelligent fan system that adjusts the rotating speed to reduce power consumption when the system is idle. It uses high-performance chipset to reduce chipset power consumption. It uses POTS short-loop design to reduce port power consumption in short distances.
- Future-oriented architecture design: The DSM5616 provides corresponding service boards to quickly meet operators' network and service requirements in the future without any modification

Specifications

Services	Features
GPON	ITU G.984-compliance
	8 T-CONTs
	128 GEM ports
Broadband	4K VLANs, supporting QinQ and stacking VLANs
	4K MAC addresses, supporting VMAC
	VLAN switching
	Conversion from PPPoA to PPPoE and from IPoA to IPoE
	802.1p, supporting PQ and WRR flow control, and ACL
Voice	SIP and H.248
	ISDN BRA port
	POTS short-loop design
ADSL2+	Compliance with ITU-T G992.1 to G992.5, and T1.413
	Annex M
VDSL2	G993.2-compliance
	8a, 8b, 8c, 8d, 12a, 12b, 17a profiles
SHDSL	G991,2 SHDSL.Bis supporting ATM and PTN / EFM
	EFM bonding : 2, 4, 6, 8 pairs



Specifications

Features	CCUB & CCUC control boards
SHDSL	G991.2-compliance G.SHDSL.Bis, supporting ATM and PTM EFM bonding (2-wire, 4-wire, 6-wire, or 8-wire)
Multicast	IGMPv2 and IGMPv3 IGMP proxy and IGMP snooping A maximum of 1024 configurable multicast programs in the system A maximum of 256 multicast users A maximum of 16 concurrent multicast programs for each user
Security	PPPoE+ and DHCP option82 Static and dynamic MAC address binding Anti-MAC and anti-IP spoofing Source MAC address and IP address filtering Anti-DoS attack and firewall
Maintenance and management	SNMPv1, SNMPv2, and SNMPv3 Telnet and SSHv2 Remote and batch pre-deployment Remote upgrade and monitoring

Interfaces	Features
Network ports	1x GPON + 1xGE or 2x GE
User ports	4x slots and choice of service boards: • 32-channels VDSL2 board (profiles: 8a/c/d, 12a/b, 17a), with splitters • 16-channels SHDSL board, EFM and ATM modes • 32-channel ADSL2+ board, with splitters Other service cards : please contact CXR



Specifications

Specifications	DSM5616
Dimensions (HxWxD)	88.1mm×442mm×245mm, 2U
Operating Temperature	-40 to +65 °C
Hygrometry	5% to 95% (non-condensing)
Heat dissipation	Fans with automatic speed adjustment
Power supply	AC: 110 - 230 Vac DC : -48 Vdc
Power consumption	59 to 195 W depending on installed service cards, maxi 240W
Weight	4.8 kg (empty chassis) 7.3 kg (full configuration)
Compliance	Safety : EN-60950-1 EMC/EMI : EN-55022, EN-55024

References

Reference	Description
DSM5616-AC	DSM5616 chassis with controller, Fan Tray and 110-230 Vac PSU
DSM5616-DC	DSM5616 chassis with controller, Fan Tray and 1x 48 Vdc PSU
DSM5616-ACDC	DSM5616 chassis with controller, Fan Tray and 110-230 Vac & 48Vdc PSU
	Subscriber cards
DSM5616-32VDSL2	32 channels VDSL2 card, 17a/12b/8d/8c/8a profiles, integrated splitters
DSM5616-32ADSL2	32 channels ADSL2+ card, integrated splitters
DSM5616-16VDSL2-30A	16 channels VDSL2 card, 30a/17a/12b/8d/8c/8a profiles, integrated splitters
DSM5616-16SHDSL	16-channel G.SHDSL board (supporting ATM and PTM)
DSM5616-CA32DSL	Cable for 32x VDSL/ADSL lines
DSM5616-CA16SHDSL	Cable for 16x SHDSL lines

