Mini IP DSLAM
SURPASS hiX 5608

Release 1.0

Broadband Access Solution for Fiber To The Building (FTTB).

The Nokia Siemens Networks SURPASS hiX 5608 Mini IP DSLAM is an innovative platform for access networks to provide broadband services in a FTTB (Fiber To The Building) deployment scenario.

Wall Mountable Mini IP DSLAM with VDSL2 and ADSL2+ services

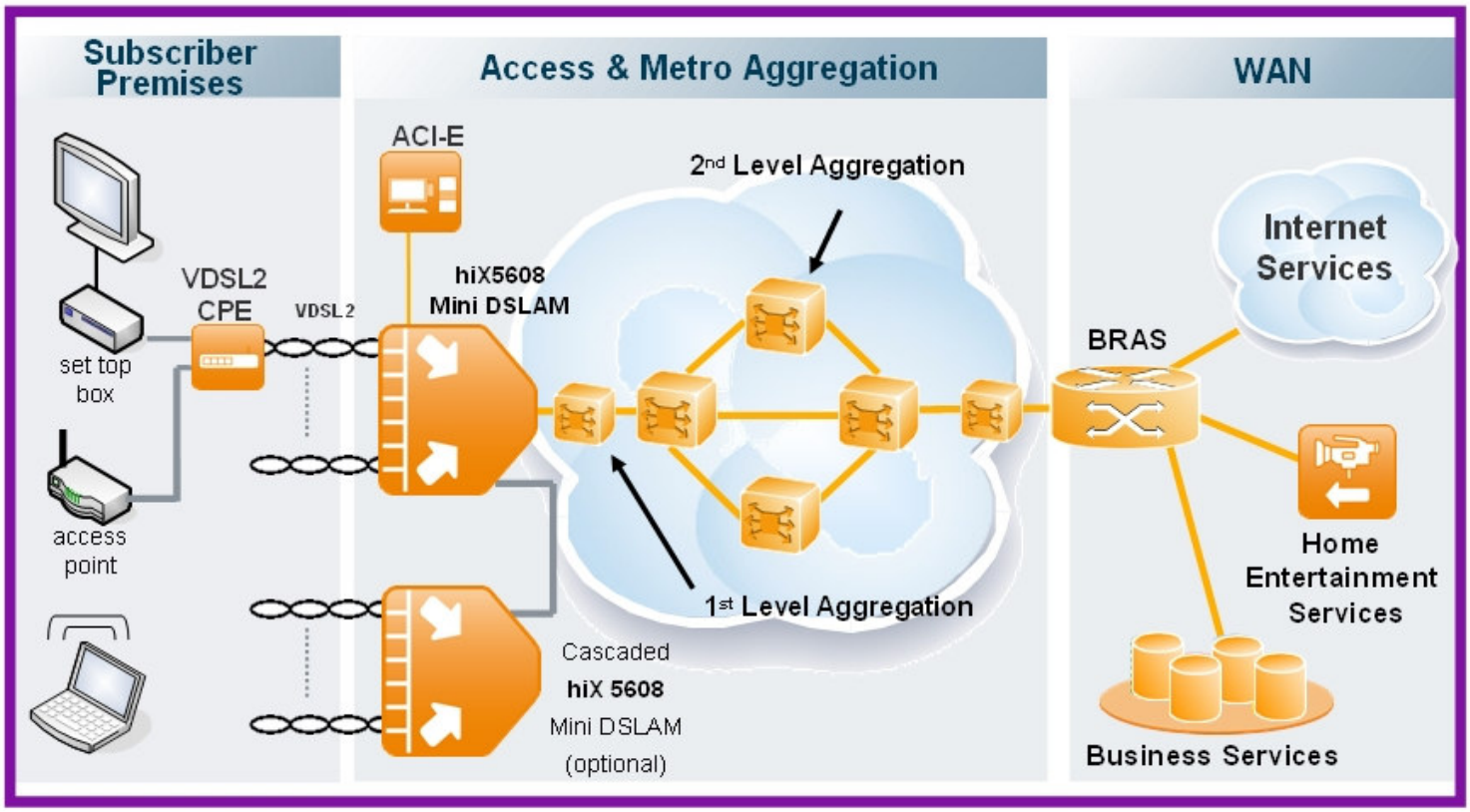
- Economic solution dedicated to multiple dwelling units such as office and apartment buildings and for sparsely populated areas.
- Suitable for extending Ethernet reach over the existing copper plant in indoor and remote locations.

The SURPASS hiX 5608 provides up to 8 ports of VDSL2 including support for all profiles up to and including VDSL2 profile 30a. Uplink interface is provided by 2 x SFP Gigabit Ethernet (optical or electrical) and 2 x GTX (100/1000BaseT) which can also be used for stacking/cascading. The unit is powered by 110/230V AC

The access to the customer is provided over the existing copper within the building without additional investment in the infrastructure. It can provide the broadband interfaces utilizing VDSL2 with backwards compatibility to ADSL2(+).

Its high-speed interfaces are suitable for asymmetrical and symmetrical applications such as super-fast Internet access, teleworking, video conferencing, peer-to-peer (P2P) connections, virtual private networking, streaming multimedia content and videos (IPTV for HDTV broadcast).

The SURPASS hiX 5608 IP DSLAM family also allows secure high-speed applications for business customers like LAN-to-LAN or Voice services over broadband.



SURPASS hiX 5608 Mini IP DSLAM Application Scenario

General DSLAM Specifications

System Architecture

- Mini IP DSLAM with 8 xDSL ports
- Fan-less Design
- Ideal for indoor FTTB deployment
- Locked wall mountable chassis
- Integrated AC Power Supply (110…240V AC, 50/60 Hz)
- LED indicators for power, failure and operation
- Intrusion detection via door contact
- Uplink via 2 x SFP or 2 x GTX interfaces
- Local Craft Terminal (LCT) interface supports 10/100BaseT

Uplink Interfaces

- Supports point-to-point network topology
- 2 x SFP Gigabit Ethernet (optical or electrical)
  - 1000Base-SX / LX / ZX
  - Support of link aggregation function (LAG) acc. to IEEE 802.3ad
  - Support of flow control acc. to 802.3x
- 2 x GTX (100/1000BaseT) RJ-45 for uplink or stacking/cascading

Subscriber Interfaces

- VDSL2 interface according to ITU-T G.993.2
  - Support of Ethernet over VDSL2 acc. to EFM 802.3ah
  - Supports Bandplans 997and 998
  - Supports Profiles 8a, 8b, 12a, 12b, 17a & 30a
  - Support of seamless rate adaptation
  - Support of Impulse Noise Protection
  - Support of upstream (UPBO) and downstream (DPBO) power back off
  - Configurable policing data rate
- Backwards compatibility to ADSL2+
  - ADSL2+ interface according to ITU-T G.992.5
  - ADSL2 interface according to ITU-T G.992.3
  - Support of ATMoADSLx
  - Support ADSL2+ power management
  - Configurable policing data rate

Key Features

- Feature Parity to shelf based NSN IP-DSLAM (SURPASS hiX 5625 / 5630 / 5635)
- L2 Ethernet bridging functions
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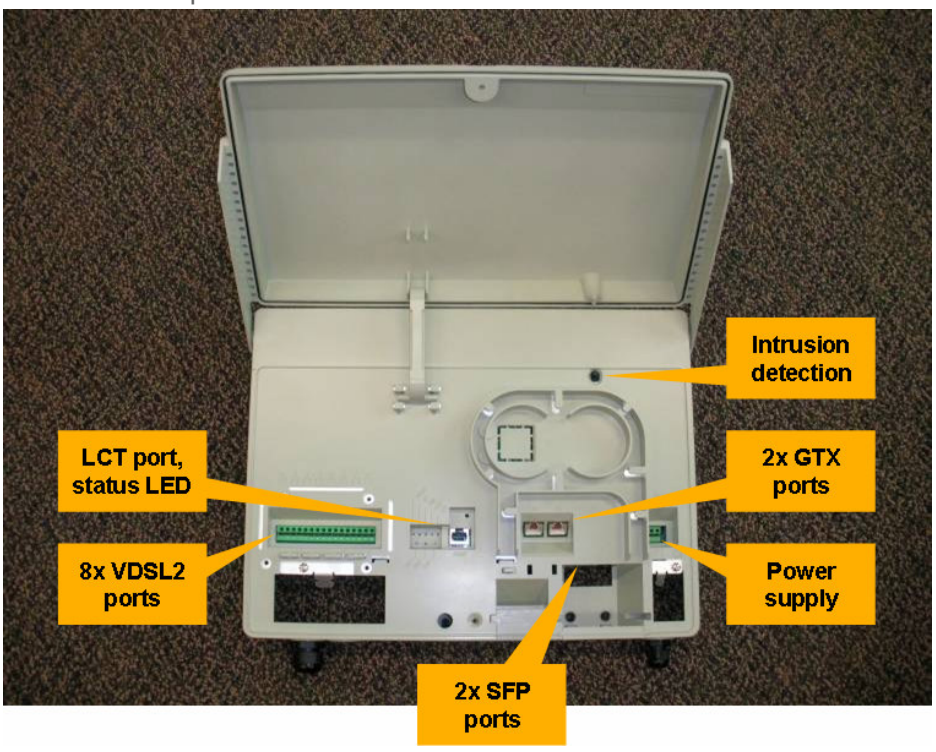
  - VLAN Services
  - Switching
  - Traffic Management (QoS) Services
- L2 ATM/Ethernet bridging functions
  - Support of multiple PVCs (VC/VP) per port
  - Support of 4 PVCs per port
  - VPI/VCI to VLAN translation
  - Provision of AAL5 SAR function
- Supports L2 Ethernet VLAN functions
- Provision of Carrier Class Ethernet Services
- TR-101 compatibility
- DHCP relay Agent (incl. Option 82)
- VLAN Translation & VLAN Stacking (Q in Q)
- Classification acc. To DSCP/TOS
- Cascading support (daisy chain or star topologies)
- Supports up to 4 concurrent connections (= services) per user port (UNI; U reference point)
- Support up to 256 independent connections at the uplink interface (V reference point)
- IGMP Multicast functions
- L2 VPN Service
- Transparent LAN Services
- Management via SNMP V2/V3
- Management via CLI (Telnet via SSH)

Physical Data

- Dimensions (H x W x D): 275 x 380 x 80 mm
- Power Consumption: max. 40 Watts

Environmental and Safety Features

- Indoor deployment acc. to ETSI 300 319-1-3, Class 1.3E and ETSI EN 300 019-2.3 Test Spec T3.1E
- Compliant to ETSI 300 019-1-3, Class 3.3 and ETSI EN 300 019-2-3 Test Spec T3.3
- RoHS class 6
- Storage acc. to ETSI EN 300 019-1-1 class 1.3E and ETSI EN 300 019-2-1 Test Spec T1.3E
- Transportation acc. to ETSI EN 300 019-1-2 class 2.3 and ETSI EN 300 019-2-2 Test Spec T2.3
- WEEE compliance
- Compliant to ETSI TS 102 533 (1007-11)
- Environmental, EMC and Safety Requirements
- EMC and CE acc. to EN 300386 V1.3.3:2005
- ETSI EMC compliant (class B) acc. to EN 55 022/FCC part 15 CE
- Environmental conditions for equipment acc. to ETS 300 019 Class 3.3
- Environmental conditions for shelter acc. to ETS 300 019 Class 4.1
- Environmental conditions for shelter acc. to IP42
- Overvoltage and Lightning protection acc. to ITU-T K.21
- Overvoltage and Lightning protection acc. to ITU-T K.45
- Admissable overvoltage acc. To ETSI EN 300 132-2
- Product safety acc. to EN 60 950-1:2001 and EN 550 11
- MTBF and MTTR definition acc. to IEC50(191) and CEI/IEC 617



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