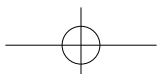




ATN 950B Product Brochure

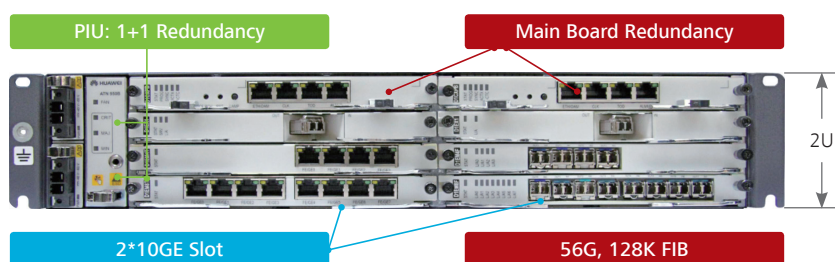
HUAWEI TECHNOLOGIES CO., LTD.



Product Overview

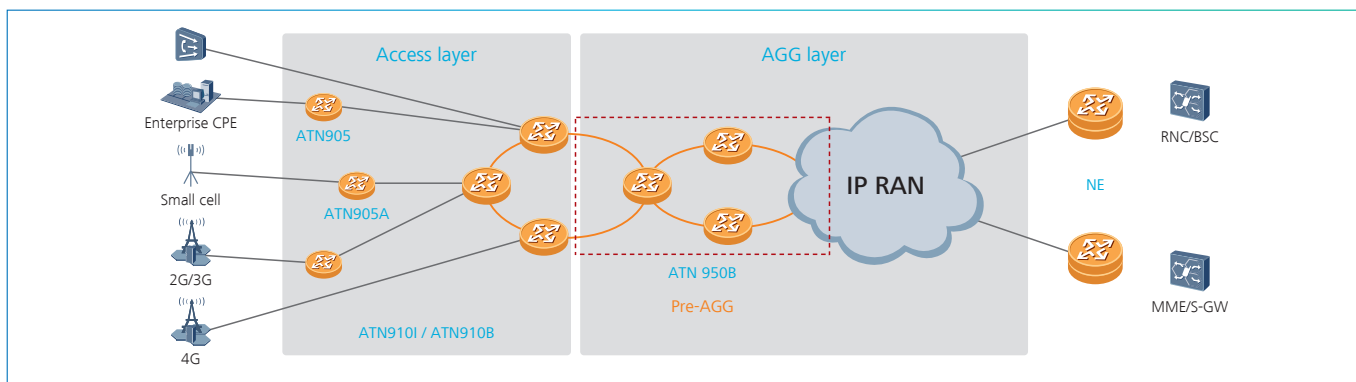
Designed for 2G/3G/LTE, VLL (Virtual leased line) and integrated services bearing, ATN 950B is a comprehensive device with 10GE ports. The compact design with 300mm depth and 2U height makes it occupy less space and satisfy all kind demands of machine room. ATN 950B has large capacity of 56G and 6 flexible slots. The main control panel and power panel support redundancy, which can ensure the flexibility and reliable of services. With the faith of Huawei 'Any Media', ATN950B has functions of multi-service access, clock transmit in any medium, high precision frequency and time synchronism. Besides, it provides multiple access port, such as copper cable, fiber-optical and so on. It can be co-cabinet with BTS BBU, which can save precious site resource and reduce the Capex of carrier.

Product Appearance



Network Position

Designed for 2G/3G/LTE, VLL (Virtual leased line) and integrated services bearing, ATN 950B is a comprehensive device with 10GE ports. The compact design with 300mm depth and 2U height makes it occupy less space and satisfy all kind demands of machine room. ATN 950B has large capacity of 56G and 6 flexible slots. The main control panel and power panel support redundancy, which can ensure the flexibility and reliable of services. With the faith of Huawei 'Any Media', ATN950B has functions of multi-service access, clock transmit in any medium, high precision frequency and time synchronism. Besides, it provides multiple access port, such as copper cable, fiber-optical and so on. It can be co-cabinet with BTS BBU, which can save precious site resource and reduce the Capex of carrier.

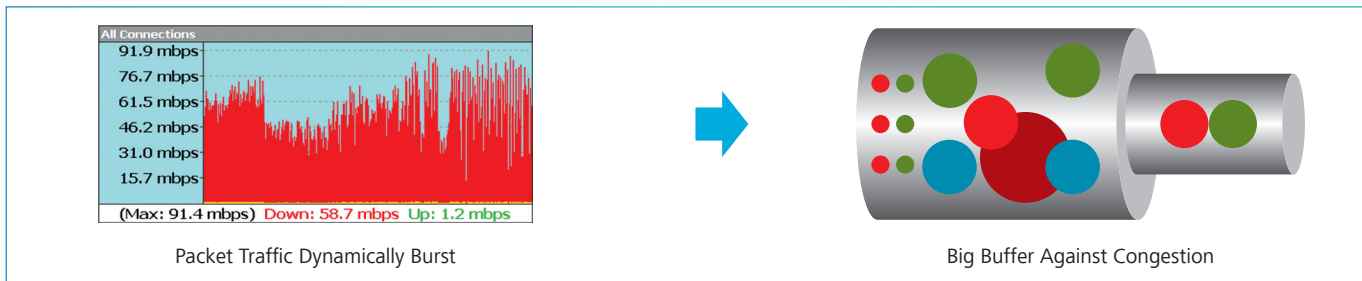


Typical application scenarios of ATN950B

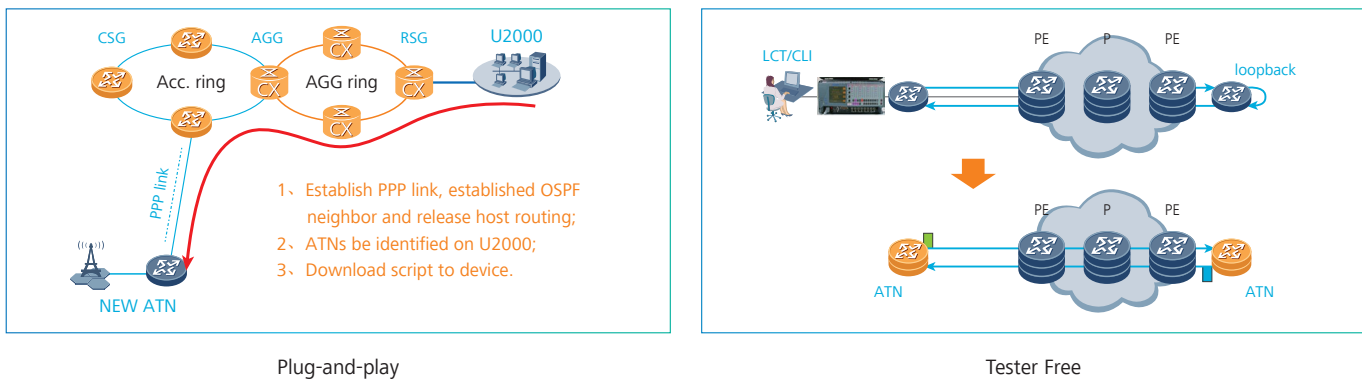
Product Features

- **Compact 10GE Redundancy Platform:** Only 2U height, coordinating with multiple security functions, ATN 950B has high reliability with the main control panel redundancy, cross board redundancy and power panel redundancy.
- **Any Media Access:** Multiple service access interfaces such as 10GE/GE/FE, Cpos, Smart E1 are supplied, so ATN 950B can totally meet the demands of services and scenarios, boosting the unification of multiple networks at the last mile.

- **Large Capacity, All Services Borne:** ATN 950B has eight 10GE ports, two 10GE ports of single slot which is better to satisfy the customer's service access demand. ATN 950B supports service comprehensive bearer of 2G/3G/LTE and VLL (Virtual leased line). As pre-AGG, and with large capacity of 56G and FIB of 128K, ATN 950B can be applied in scenarios of 10GE rings, ring with chain and pre-aggregate node.
- **Big Buffer Design, Against Congestion Effectively:** With the design of big buffer, ATN 950B series can against network traffic burst effectively and promote customer experience.



- **Plug-and-Play, Replace-and-Play, High Efficiency Deployment:** One time site visit and remote plug and play configuration can realize services fast provisioning to 5 minutes. With the design of Built-in test packet generator (compliant with RFC2544/Y.1564), it is tester free for the service deployment.



- **Perfect Clock synchronization Solution:** ATN 950B series supports IEEE1588v2 OC, BC and TC all mode, 1588 ACR, Synchronous Ethernet, Adaptive clock recovery which perfectly solves the problems of high precision clock synchronization and in-buliding clock coverage of mobile packet bearer network. ATN 950B series fulfills the clock synchronization requirement of LTE evolution in long run and reduces investment on GPS and BITS.
- **Hardware NQA&OAM, Reliable Performance Statistics:** ATN 950B series has the hardware-OAM capability. 3.3ms packet interval ensures the fault be detected as fast as possible and services be switched within 50ms. It supports multiple OAM protocols (Y.1731, Y.1564, BFD over everything, TWAMP and RFC2544 etc.). And, via collecting and detecting real-time services performances, the quality status of the whole network is open-and-shut.
- **SDN-Based Software Architecture, Simplified O&M:** Based on SDN software architecture, faced application, ATN 950B supplies standard north API and south API to realize new service rapid innovation. The separation of controlling plane and forwarding plane makes the disperse devices unified managed and service deployment decoupled from forwarding plan.

Physical Interface Card

EM4T	4 Channels GE/FE Electric Interface Board	ML1A	16 Channels E1 Electrical Interface Board (120 ohm)
EM8T	8 Channels GE/FE Electric Interface Board	ML1A	16 Channels E1 Electrical Interface Board (75 ohm)
EM4F	4 Channels GE/FE Optical Interface Board	ML1B	16 Channels E1 Electrical Interface Board (120 ohm)
EM8F	8 Channels GE/FE Optical Interface Board	MD1A	32 Channels E1 Electrical Interface Board (75 ohm)

EM8M	4 Channels GE/FE Optical +4 Channels GE/FE Electric Interface Board	MD1B	32 Channels E1 Electrical Interface Board (120 ohm)
EX1S	1 Channel 10GE Optical Interface Board	CQ1B	4 Channels Channelized OC-3c/STM-1c POS Optical Interface Board
EX2S	2 Channel 10GE Optical Interface Board	PQ1	4 Channels OC-3/STM-1 POS Optical Interface Board

Product specifications

ATN 950B main specification	
Capacity	<ul style="list-style-type: none"> Switching Capacity: 44Gbps/56Gbps Forwarding Performance with Service(IMIX): 66Mpps/84Mpps
Slots	<ul style="list-style-type: none"> 2 slots for CXP and 6 slots for service interface boards
Dimension (WxDxH)	<ul style="list-style-type: none"> 442mmx220mmx88.9mm (2U)
Full equipped weight	<ul style="list-style-type: none"> 7.2kg
Interface type	<ul style="list-style-type: none"> 10GE/GE/FE, E1, Channelized STM-1, STM-1
L2 Feature	<ul style="list-style-type: none"> IEEE802.1q, IEEE802.1p, IEEE 802.3ad, IEEE 802.1ab STP, RSTP, MSTP, RRPP, VLAN Switch
L3 Feature	<ul style="list-style-type: none"> IPv4, IPv6 Router protocol: OSPFv2/V3, RIPv2, IS-IS, IS-ISv6, BGPv4, BGPv4+, IPv6 over IPv4 Tunnel, IPv6CP, IPv6 ACL/Telnet, 6VPE, static Router protocol Dynamic ARP and static ARP VLAN IF
Multicast	<ul style="list-style-type: none"> IGMP v1/v2/v3, IGMP Snooping, Static Multicast Routing, PIM-SM/SSM, MBGP
MPLS Feature	<ul style="list-style-type: none"> LDP, RSVP-TE Seamless MPLS L2VPN (VPLS/H-VPLS/VLL), MPLS/BGP L3VPN
QoS	<ul style="list-style-type: none"> Based on traffic classification Diff-Serv model Based on VLAN, 802.1p, VLAN+802.1p traffic classification WRED trTCM (double speed three colors CAR) Based on port traffic Shaping Supports priority queues per SQ8 PQ, WFQ 3 level HQoS
Network reliability	<ul style="list-style-type: none"> GR LSP1:1, PW Redundancy, IP/LDP FRR, TE FRR, VPN FRR BFD for LSP, PW, IGP, IPV4 IEEE 802.1ag, IEEE 802.3ah, ITU-T Y.1731, G.8032
OAM	<ul style="list-style-type: none"> ETH OAM (EFM, CFM), MPLS TP OAM NQA, RFC 2544, Y.1564 TWAMP (server /reflector)
O&M	<ul style="list-style-type: none"> DHCP Plug & Play DCN Plug & Play
Clock	<ul style="list-style-type: none"> 1588v2, 1588 ACR, E1 line clock, Synchronous Ethernet
Operating Temperature	<ul style="list-style-type: none"> Long-term working temperature: -40°C to +65°C Storage temperature: -40°C to +70°C
Humidity	<ul style="list-style-type: none"> Working environment Humidity (long-term): 5% RH to 95% RH, non-condensing Working environment Humidity (short-term): 0% RH to 95% RH, non-condensing

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