

Huawei All-in-one Access Platform MA5600T



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SmartAX MA5600T is the global first all-in-one access platform which can provide DSL and optical integrated access. It can provide high density ADSL2+, VDSL2, POTS, ISDN, GPON and Ethernet fiber P2P access, triple-play service, TDM/ATM/Ethernet leased line services for business customers and mobile backhaul with high reliability and high precision clock, high density GE/10GE interfaces for cascading remote access equipments. MA5600T helps to simplify network architecture, to enable seamless migration in FTTx network and lower TCO essentially.

There are two types of frame. The large frame has 16 service slots while the middle frame (which named MA5603T) has 6 service slots. The hardware and software are all compatible between MA5600T and MA5603T.

- 2006, global first T-bit all-in-one platform for commercial deployment, and IEC InfoVision Award for creative in access platform
- 2008, global first "10G PON ready" all-in-one platform, enable FTTx seamless evolution
- 2009, global first aggregation and access integrated all-in-one platform, simplify the network architecture

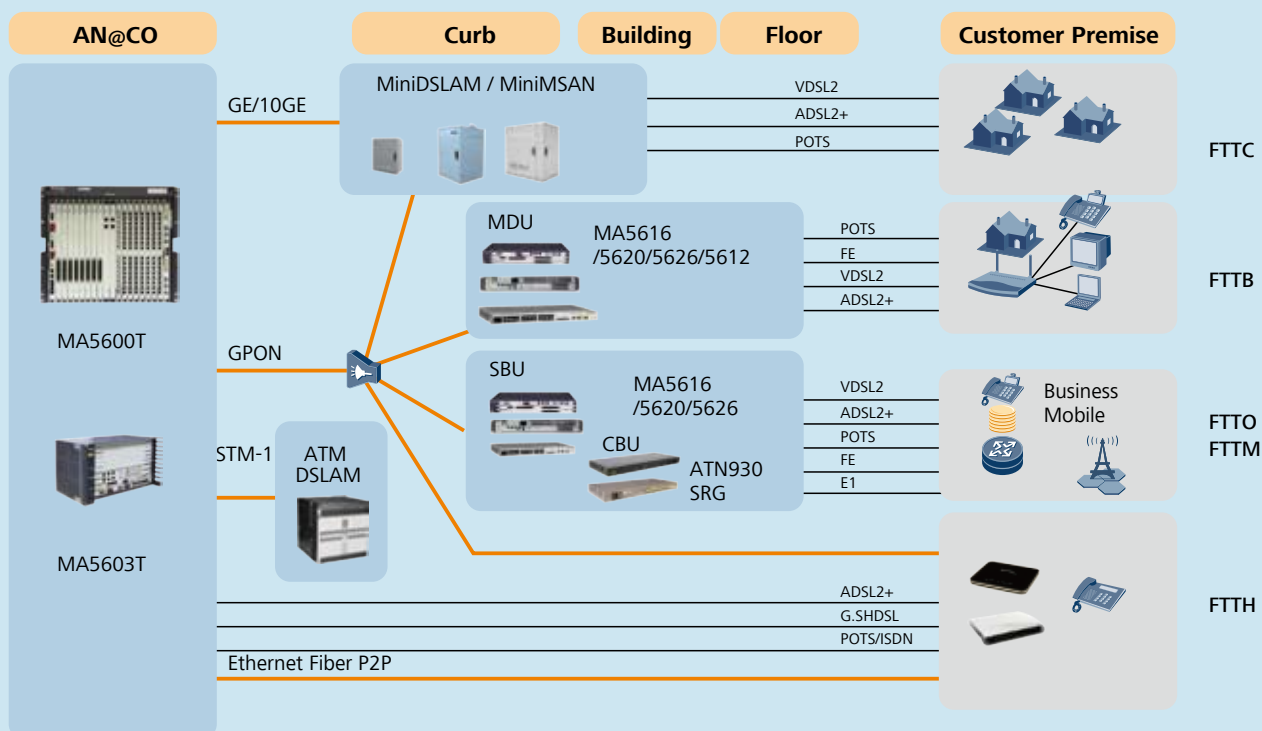


MA5600T



MA5603T

Typical MA5600T Access Network



Features

Any Access

- Support multiple access methods: VDSL2/ADSL2+/G.SHDSL/POTS/ISDN/GPON/Ethernet P2P
- Support multiple scenarios: FTTC / FTTB / FTTH / FTTO / FTTM

Any Service

- Large capacity IPTV service provision, 8K multicast users and 4K multicast channels
- H-QoS support 3-level QoS (Different ISP/service/user) guaranteeing OLT wholesale
- Traditional E1 service access, Native TDM or CESoP for traditional E1 service of enterprise and mobile backhaul
- E2E high reliability guarantee for business and mobile backhaul, BFD/LAG/Smart Link for uplink redundancy and 50ms

switching time of Type B/Type C for fiber protection;

- E-LAN function for local traffic self-switching, meet the requirement of enterprise and campus network

Aggregation and Access Integrated

- Large aggregation capacity, 3.2T bit/s backplane capacity, 960G bit/s switch capacity, 512K MAC addresses
- High density GE/10GE interfaces for cascading, up to 36*10GE or 140*GE interfaces, no need for additional investment of aggregation switches
- High reliability networking support direct connection to the BRAS, ONU dual-homing to two OLTs for redundancy and hitless software upgrade function

Unique ATM DSLAM Cascading

- Cascade ATM DSLAM with ATM STM-1 interfaces
- Reduce OPEX by reusing ATM DSLAM and removing ATM aggregation network

Green Design

- First company that complies to COC standard, average DSL port power consumption is 10% less than industry
- Unique energy-saving bus, the idle service card can be powered off when there is no service provision
- With Huawei-developed GPON chipsets, maximum power consumption of the 8-port GPON line card is only 55W

Technical Specifications

System Performance

- 3.2T bit/s backplane capacity, 960G bit/s switch capacity, 512K MAC addresses
- Line speed L2/L3 switching
- Static route/RIP/OSPF/MPLS
- BITS/E1/STM-1/Ethernet Synchronization/IEEE 1588v2

VDSL2 Line Card

- 48×port per card(over ISDN or over POTS) for profile 8a to 17a
- 24×port per card(over POTS) for profile 30a
- Backward compatible to ADSL/ ADSL2+
- 2×twisted pairs bonding
- VN/ INP+INM/ SOS

ADSL2+ Line Card

- 64×port per card with Annex A, B, M and J
- Enhanced INP with INM
- 2×twisted pairs bonding

G.SHDSL Line Card

- 16×port per card with .bis
- 4×twisted pairs bonding(M-pair or EFM bonding)
- MELT and wetting current

POTS Line Card

- 64×port per card with G.711/ G.723/ G.729 coding/ decoding
- H.248/ SIP uplink
- T.38 FAX and MoIP
- Voice Quality Enhancement

GPON Line Card

- 8×port per card with pluggable SFP optical module(Class B+ or Class C+)
- 4K GEM ports and 1K T-CONTs per GPON port
- Up to 1:128 splitting ratio
- Bidirectional FEC
- Rogue ONT detection and isolation
- Flexible DBA configuration mode :lower delay or high bandwidth efficiency

Ethernet P2P Line Card

- 16×port per card with SFP optical module
- Single fiber double direction access, 100Mbit/s per port
- DHCP Option 82 relay agent and PPPoE relay agent
- Ethernet OAM

ATM Cascading Card

- 4×STM-1 ports per board
- 64K PVCs per system
- 1K PPPoA to PPPoE or IPoA to IPoE per system

Dimensions (Width × Depth × Height)

- MA5600T Chassis : 530mm×275.8mm×447.2 mm
- MA5603T Chassis : 442mm×283.2mm×263.9mm

Running Environment

- Ambient working temperature -25°C to +55°C

Power Supply

- -48 V or -60 V DC powering via redundant power feeds
- Working voltage range: -38.4 V to -72 V