

Huawei SmartAX MA5600T

Global First All-in-one Access Platform



HUAWEI TECHNOLOGIES CO., LTD.



Huawei SmartAX MA5600T

Global First All-in-one Access Platform

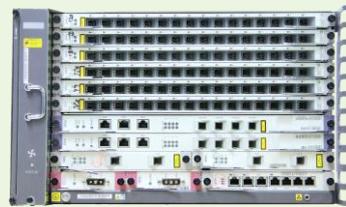


SmartAX MA5600T is the global first OLT which integrates the functionality of aggregation switch and edge router. It can provide high density GPON, 10GPON and Ethernet P2P optical access, triple-play service, TDM/ATM/Ethernet leased line services for business customers and mobile backhaul with high reliability and high precision clock, and high density GE/10GE interfaces for cascading remote access equipments. MA5600T helps to simplify network architecture, to improve network reliability and lower TCO essentially.

There are three types of frame of MA5600T series product. The large frame has 16 service slots while the middle frame (which named MA5603T) has 6 service slots, the small frame (which named MA5608T) has 2 service slots. The service card and software are all compatible between MA5600T, MA5603T and MA5608T.



MA5600T



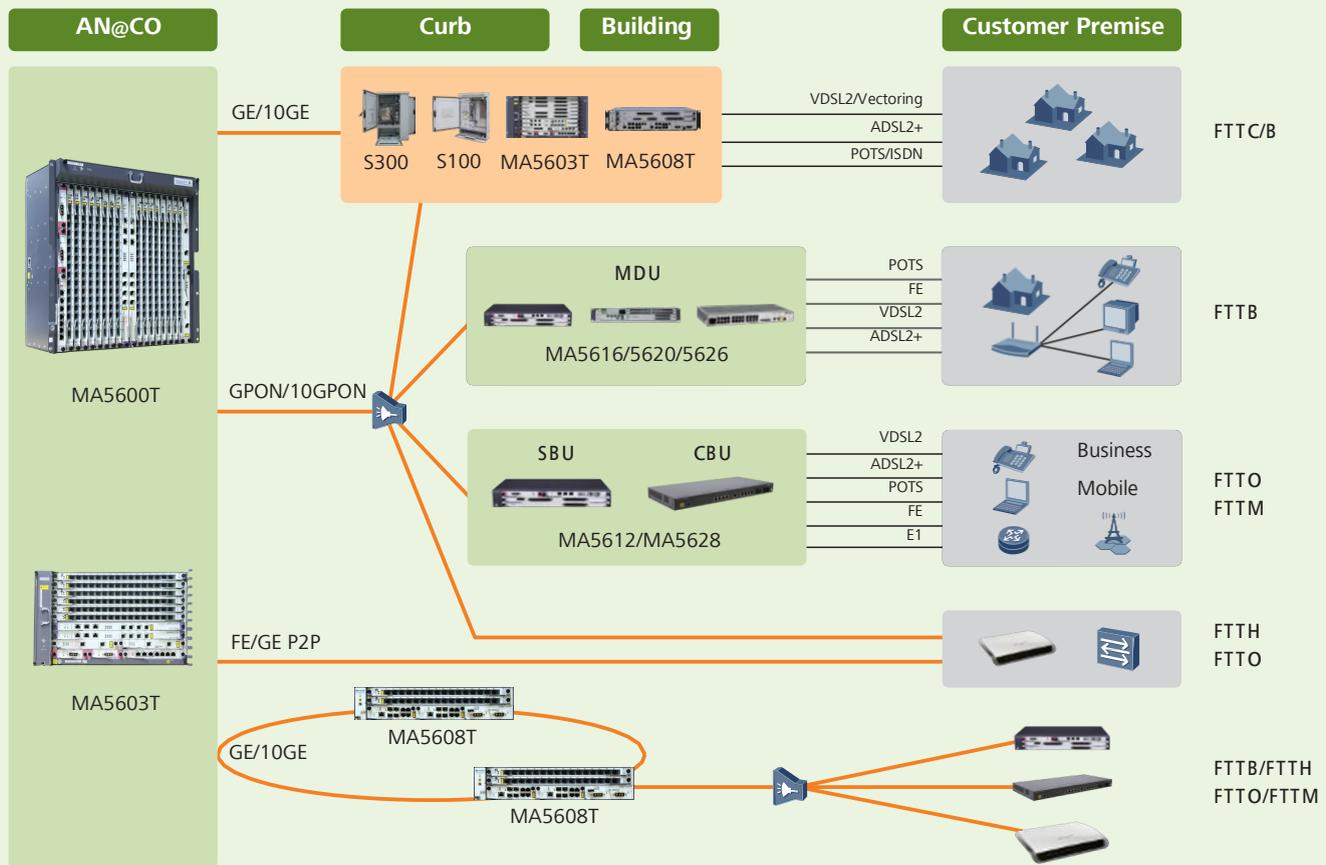
MA5603T



MA5608T

- 2006, global first T-bit OLT for commercial deployment, and IEC InfoVision Award for creative in access platform
- 2008, global first "10G PON ready" OLT, enable FTTx seamless evolution
- 2009, global first access and aggregation Integrated OLT, simplify network architecture
- 2010, global first "IPv6 ready" (phase 2 enhanced) access device certificated by IPV6 forum.
- 2011, 40G PON prototype release
- 2012, 16-port GPON and 10GPON commercial deployment

Typical MA5600T Access Network



Features

Access and Aggregation Integrated

- Large aggregation capacity, 3.2T bit/s backplane capacity, 1920G bit/s switch capacity, 512K MAC addresses
- High density GE/10GE interfaces for cascading, up to 128*10GE or 768*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

Any Access

- High performance IPTV service, more ISP access
- H-QoS support 4-level QoS guarantees OLT wholesale
- Traditional E1 service access, Native TDM or CESoP for traditional E1 service of enterprise and mobile base station access
- E2E high reliability guarantees business customers and mobile backhaul, BFD/LAG/MSTP/RRPP/Smart Link for uplink redundancy and Type B/Type C/Type C dual-homing for fiber protection

- E-LAN function for local traffic inter-connection, meet the requirements of enterprise and campus network

Green

- With the unique GPON chipsets, the maximum power consumption of the 16-port GPON line card is only 50W, 30% less than industry.
- With the unique energy-saving bus, the idle service card and idle service port can be powered off.

Smooth Evolution

- Smooth evolution from GPON to NGPON with the integrated platform
- Smooth evolution from IPv4 to IPv6 with IPv4/IPv6 dual-stack, support IPv6 MLD

Technical Specifications

System Performance

- 3.2T bit/s backplane capacity, 1920G bit/s switch capacity, 512K MAC addresses
- Line speed L2/L3 switching
- Static route/RIP/OSPF/MPLS
- TDM private line service with Native TDM or CESoP
- BITS/E1/STM-1/Ethernet Synchronization/IEEE 1588v2/1PPS+ToD

GPON Line Card

- 8/16*port per card with pluggable SFP optical module (Class B+ or Class C+/C++ are optional)
- Up to 1:128 splitting ratio
- Bidirectional FEC
- ONU-based and queue-based traffic shaping
- Rogue ONT detection and isolation
- Type B / Type C protection and Type C dual-homing
- Optical power meter (can support ± 1 dB precision)
- eOTDR (1:8 splitting ratio)

10G GPON Line Card

- 8*port per card with pluggable SFP+ optical module
- Up to 1:128 splitting ratio (N1)
- Bidirectional FEC
- Rogue ONT detection and isolation
- Type B / Type C protection and Type C dual-homing
- Coexist with GPON

Ethernet P2P Line Card

- 48 port per card with CSFP optical module, 768 ports per shelf
- Port-based and queue-based traffic shaping
- Single fiber double direction access, 100Mbit/s or 1000Mbit/s per port
- DHCP Option 82 relay agent and PPPoE relay agent
- Ethernet OAM
- Ethernet synchronization

Dimensions

(Width*Depth*Height)

- MA5600T Chassis (10U) :
530mm×275.8mm×447.2 mm
- MA5603T Chassis (6U) :
442mm×283.2mm×263.9mm
- MA5608T Chassis (2U) :
442mm×233.5 mm×88.1mm

Running Environment

- MA5600T Ambient working temperature : -25°C to +55°C
- MA5603T/MA5608T Ambient working temperature : -40°C to +65°C

Power Supply

- MA5600T/MA5603T : -48 V or -60 V DC powering via redundant power feeds, working voltage range: -38.4 V to -72 V
- MA5608T supports both DC / AC power supply mode, and supports dual power protection and battery backup while using the AC power supply.

Copyright © Huawei Technologies Co., Ltd. 2015. All rights reserved.

General Disclaimer

THE INFORMATION IN THIS DOCUMENT MAY CONTAIN PREDICTIVE STATEMENTS INCLUDING, WITHOUT LIMITATION, STATEMENTS REGARDING THE FUTURE FINANCIAL AND OPERATING RESULTS, FUTURE PRODUCT PORTFOLIO, NEW TECHNOLOGY, ETC. THERE ARE A NUMBER OF FACTORS THAT COULD CAUSE ACTUAL RESULTS AND DEVELOPMENTS TO DIFFER MATERIALLY FROM THOSE EXPRESSED OR IMPLIED IN THE PREDICTIVE STATEMENTS. THEREFORE, SUCH INFORMATION IS PROVIDED FOR REFERENCE PURPOSE ONLY AND CONSTITUTES NEITHER AN OFFER NOR AN ACCEPTANCE. HUAWEI MAY CHANGE THE INFORMATION AT ANY TIME WITHOUT NOTICE.

HUAWEI TECHNOLOGIES CO., LTD.

Huawei Industrial Base
Bantian Longgang
Shenzhen 518129, P.R. China
Tel: +86-755-28780808
Version No.: M3-028708-20151228-C-1.0

www.huawei.com