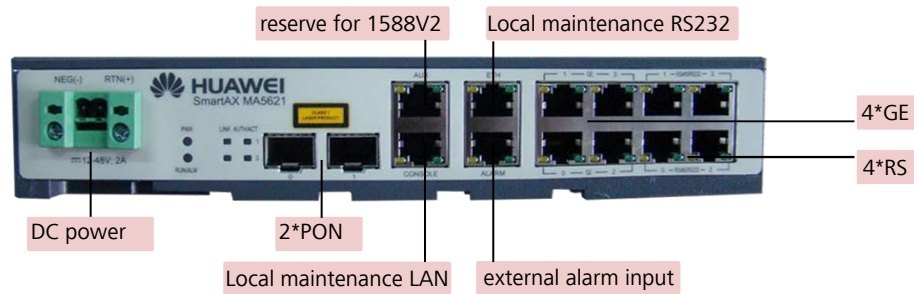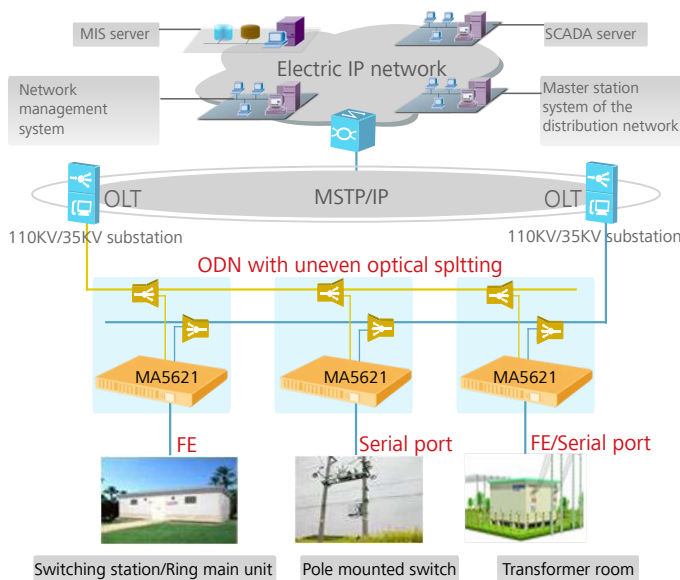# SmartAX MA5621

Huawei SmartAX MA5621 (MA5621 for short) is the first multi dwelling unit (MDU) designed specifically for an electric utility network in the industry, which supports passive cooling and provides two gigabit passive optical network (GPON) or gigabit Ethernet (GE) ports, four GE electrical ports, and four RS485 or RS232 serial ports. The MA5621 allows terminal electronic devices to remotely collect and transmit required information, for example, to remotely control the power, monitor environment safety, and read meters for billing. The MA5621 also monitors video services. The MA5621 features a broad temperature range, low power consumption, mute design, high stability, environment-friendlily and energy conservation, and can be used on workbenches and installed in corridors and cabinets.
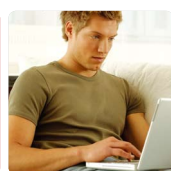
Appearance

reserve for 1588V2 | Local maintenance RS232

4*GE
4*RS

DC power | 2*PON
Local maintenance LAN | external alarm input

Application Scenario

MIS server
SCADA server
Network management system
Electric IP network
Master station system of the distribution network
OLT
MSTP/IP
OLT
110KV/35KV substation
110KV/35KV substation
ODN with uneven optical spltting
MA5621 | MA5621 | MA5621
FE | Serial port | FE/Serial port
Switching station/Ring main unit | Pole mounted switch | Transformer room

The MA5621 is installed in an outdoor cabinet for remotely collecting and transmitting required information in the electric system. It connects to two optical line terminals (OLTs) by using two PON ports for redundancy protection and connects to the switching station, ring main unit, pole mounted switch, or transformer room by using the FE or serial port.

HUAWEI

Highlights

- Automatic adaptation to GPON and GE modes: The MA5621 provides two uplink ports that use the small form-factor pluggable (SFP) optical modules to meet different site requirements.
- Support for data collection from electric sites, video monitoring, and information transmission.
- A metallic shell and passive cooling, preventing service interruptions due to fan faults.
- Auto-adaptive GE/FE electrical ports and configurable RS485/RS232 serial ports, reducing the number of operation times
- Support for 6 kV surge protection capability, applicable to thundery and rainy areas.
- Support for the operating temperature ranging from −40°C to 85°C, meeting extreme weather conditions.
- Plug-and-play (PnP) service provisioning: The MA5621 allows remote issuing of configuration. A management channel and a service channel are created after the MA5621 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.

Features

GPON	Complies with ITU G.984 standards
	128 T-CONTs
	4096 GEM ports
Broadband	4096 VLANs, supporting QinQ and stacking VLANs
	4096 MAC addresses, supporting VMAC
	802.1p, supporting PQ and WRR flow control, and ACL
Leased line service	Transparent transmission of services complying with IEC60870-5-101, IEC60870-5-104, IEC61850, CDT, and DNP
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	Supports SNMPv1, SNMPv2, and SNMPv3
	Supports Telnet and SSHv2
	Remote and batch pre-deployment
	Remote upgrade and monitoring

Specifications

Dimensions (H x D x W)	44.4 mm x 180 mm x 235 mm
Network-side port	2 x GPON 2 x GE (optical) 1 x GE (optical) + 1 x GPON SFP; SC/PC (UPC)
User-side port	4 x GE/FE (auto-adaptive) + 4 x RS485/RS232 (configurable using software)
Operating temperature	−40°C to 85°C; startup at −25°C
Humidity	5% to 95% (non-condensing)
Heat dissipation mode	Nature heat dissipation without fans
EMC standards	Complies with EN 55022 Class B
Lighting proof	Power/ GE port: 6Kv; RS port: 4Kv
Power supply	AC: 220 V/110 V DC: 12 V/24 V/48 V
Weight	1.5 kg
Power consumption	10W