



ISCOM5108 EPON ONU

▼ Introduction

The ISCOM5108 is a low-cost MDU with metallic shell, 8 FE interfaces in downlink, 1 EPON in uplink, and high price performance ratio. It is mainly used in the FTTB access scenario and its cost is much lower than that in PON+LAN networking.



ISCOM5108 (C)

▼ Features

◆ Sound design

- Adopt single-panel cable outlet (power interface and service interfaces are on the same panel, namely, front panel) to facilitate installation and cable outlet.
- Support wall-mount and rack installation to facilitate installation and deployment.
- Adopt a fan-free and noise-free design.
- Adopt a small chassis to be easily installed in multiple forms of cross-connecting cabinets.
- Adopt the metal MDU, sturdy and durable, embedded with power supply, high safety

protection level, high lightning protection level, and good quality.

- Adopt multiple power supplies (220 VAC, 60 VAC, and -48 VDC), used in various scenarios.
- Adopt a new design with price-performance ratio, able to be used in FTTB networking to replace the PON+LAN networking, thus saving cost.
- ◆ **Uniform network management and easy operation and maintenance**
- Support multiple management modes (Telnet, local serial interface, Web, SNMP, and OAM) to facilitate login and management.
- Support batch configuration, template-based configuration, offline configuration, and plug and play of ONUs, to facilitate service activation.
- Support reporting various alarms (Dying Gasp, optical link DDM, loop, etc.) to facilitate locating and clearing faults.
- Support the NView NNM system (which can manage all Raisecom devices), in which all services can be configured.



▼ Specifications

Hardware features	
Dimensions	43.6 mm (Height) × 260 mm (Width) × 130 mm (Depth)
Weight	About 1 kg
Power supply	<ul style="list-style-type: none"> ● Single power supply 220 VAC ● Single power supply 60 VAC ● Single power supply -48 VDC
Power consumption	< 10 W
Operating environment	<ul style="list-style-type: none"> ● Operating temperature: 0–50 °C ● Humidity: 10%–90% (non-condensing)
Storage environment	<ul style="list-style-type: none"> ● Storage temperature: -25 to 60 °C ● Storage humidity: 10%–90% (non-condensing)
Dustproof level	IP20
Software features	
PON features	<ul style="list-style-type: none"> ● Support being discovered and registered. ● Support IEEE 802.3ah MPCP. ● Support IEEE 802.3ah OAM. ● Support CTC EPON technical specifications. ● Support SCB. ● Support a unicast logical link and a broadcast logical link. ● Support optical link DDM and shutting down the Tx power of the optical module.
Switching	<ul style="list-style-type: none"> ● Support IEEE 802.3 frames and Ethernet II-type frames. ● Support MTU to be 1518 or 1596, with MTU being 1596 by default. ● Support rate limiting on the interface. ● Support storm control over broadcast, multicast, and DLF packets on the interface. ● Support auto-negotiation of the interface rate and duplex mode, and support configuring flow control. ● Support a MAC address table capacity of 8K.



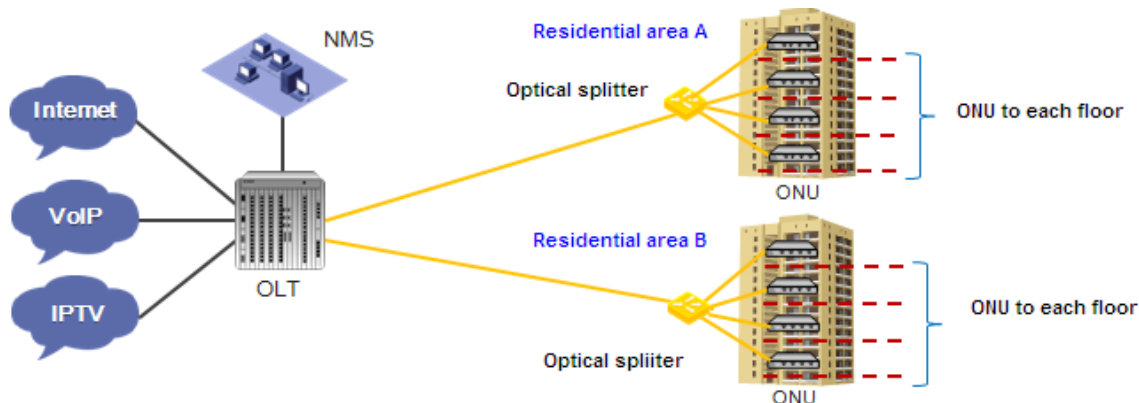
	<ul style="list-style-type: none"> ● Support MAC address learning, aging time, MAC address limit, and static MAC address. ● Support IEEE 802.1Q standard VLAN. ● Support 4094 VLANs ranging from VLAN 1 to VLAN 4094. ● Support configuring VLAN mode to transparent transmission, Tag, Trunk, and VLAN mapping. ● Support transparent transmission of packets from the uplink interface of the switching chip and configuring Trunk VLAN mode. ● Support configuring VLAN mapping rules. ● Support configuring VLAN stacking. ● Support interface loop detection between two UNIs on an ONU or UNIs on different ONUs (excluding the loop between uplink interfaces on an ONU). ● Support statistics of interface performance (including uplink interfaces of the switching chip). ● Support RSTP. ● Support discovery and management of partner devices. Support configuring and querying SNMP parameters. ● Support port mirroring. ● Support PPPoE Relay. ● Support DHCP Snooping and DHCP Relay. ● Support Link Trace of MAC addresses (for independent network management only). ● Support the IP address pool (to be cooperated with the OLT).
QoS & ACL	<ul style="list-style-type: none"> ● Support 4 priority queues. ● Support SP and WRR algorithms. ● Support Layer 2, Layer 3, and Layer 4 traffic classification. ● Support Layer 2, Layer 3, and Layer 4 filtering rules.



	<ul style="list-style-type: none"> ● Support Layer 2, Layer 3, and Layer 4 priority mapping.
Multicast	<ul style="list-style-type: none"> ● Support transparent transmission of multicast packets, IGMP Snooping, and CTC controllable multicast mode. ● Support the capacity of the multicast address table to be 128.
Management	<ul style="list-style-type: none"> ● Support OLT OAM remote management, complying with CTC v2.1 technical specifications. ● Support independent network management mode. Support SNMP v1, and v2 and reporting SNMP Trap. To use independent network management mode, you must disable loading configurations of the OLT (namely, SNMP management mode). ● Support managing Web page (IE 6.0 or later; Firefox 2.0 or later). ● Support local CLI management (Telnet and Console login). ● Support standard MIB RFC1213, RFC2233 system management table, and interface management table. Support using the third-party network management tool (such as solarwinds 8.5 or above) for management. ● Support saving, uploading, and downloading the configuration file. Support restoring default configurations.
Interface index	
EPON interface	<ul style="list-style-type: none"> ● Interface type: SC/PC ● Transmission rate: 1.25 Gbit/s ● Central wavelength: 1310 nm in Tx and 1490 nm in Rx ● Tx optical power: -1 to 4 dBm ● Maximum Rx sensitivity: -27 dBm ● Overload optical power: -3 dBm
FE interface	<ul style="list-style-type: none"> ● Interface type: RJ45 ● Transmission rate: 10/100 Mbit/s auto-negotiation ● Duplex mode: full/half mode auto-negotiation



▼ Typical applications



Introduction

- The MDU can be directly used to reach households through the Cat 5 cable, making it unnecessary to connect to the switch.
- FTTH can simplify network hierarchies, decrease fault point to facilitate future maintenance and reduce customers' maintenance cost.
- The low-powered, fan-free, and small-sized MDU can be deployed in corridor cross-connecting cabinets, basement, and low-voltage silo. It can be used to reuse the existing corridor wiring system, so as to facilitate customers in lowering cost.
- Multiple management modes, such as OAM/SNMP/WEB, can meet customers' requirements on managing various terminals.
- The MDU with multiple interfaces supports sound multicast and activation of complex services in the future.

Ordering information

Model	Description
ISCOM5108-AC	EPON uplink(SC/PC), metallic shell 8*FE ONU, single 220 VAC power.