

ISCOM HT803G-W GPON home terminal

▼ Introduction

The ISCOM HT803G-W is a GPON uplink home gateway. It provides four GE interfaces, two FXS voice interfaces, and one USB interface, and supports WLAN. It is applicable to FTTH scenarios, with appearance as below.



Features

- Elegant appearance, low power consumption, and good heat dissipation
- Compliant with ITU-T G.984/G.988 and China communication industrial standards
- Highly cost-effective, widely applicable to FTTH networking
- Integrated with GPON ONU, WLAN AP, IAD, LAN switch, and router features, thus able to provide users with data, voice, and video services all in one.
- Passing carriers' internetworking test and centralized procurement test, with guarantee for internetworking with OLTs of other vendors

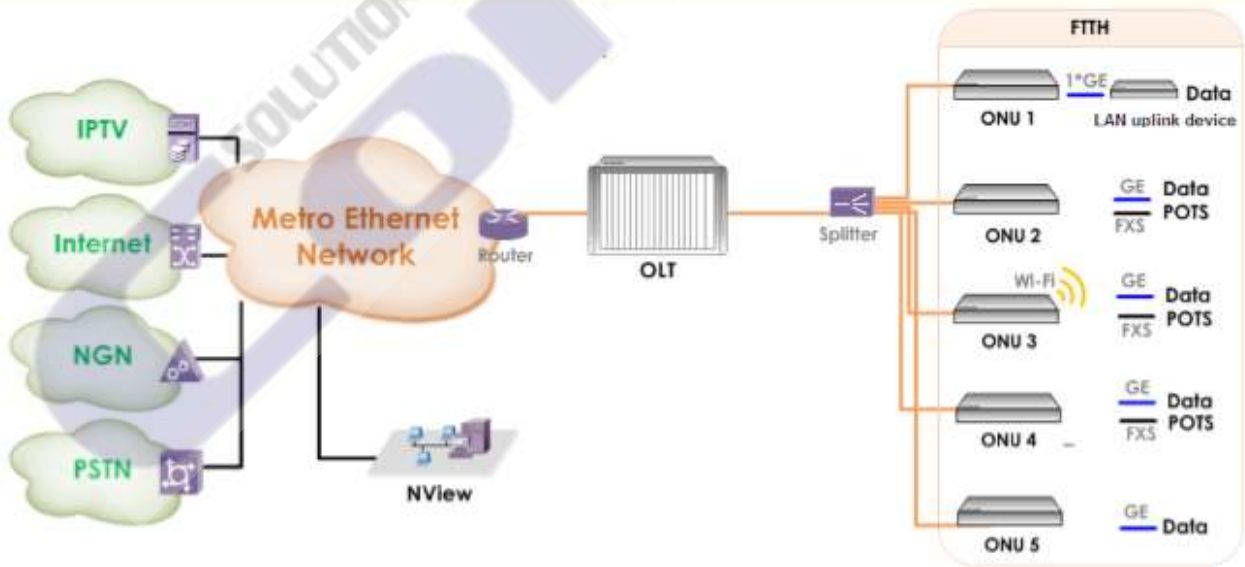
Hardware features	
Dimensions	174 mm (Length) × 129 mm (Width) × 38 mm (Height)
Weight	< 0.4 kg
Power consumption	≤ 18 W
Power adapter input	100–240 VAC (50/60 Hz)
Power adapter output	12 VDC, 2 A
Operating temperature	0–50°C
Operating humidity	10%–93% (non-condensing)

Software features	
Data	<p>The ONU provides four 10/100/1000 Base-T Ethernet interfaces, with the following features:</p> <ul style="list-style-type: none"> • Ethernet auto-negotiation and auto-MDI/MDIX • IEEE 802.11b/g/n WLAN interface • Embedded with Layer 2 switching • Embedded with Layer 3 router and home gateway • Advanced data functions, such as processing VLAN Tags, traffic classification, and packet filtering • USB 2.0 Flash
Video	<ul style="list-style-type: none"> • 2 video services: video stacking and data delivering (through unicast and multicast) • IGMP Snooping and further application optimization: when IGMP Snooping is enabled, the ISCOM HT803G-W can purposely choose to send multicast data streams upon detection of a member joining and leaving the multicast group.
Voice	<ul style="list-style-type: none"> • Multiple voice coding schemes • Echo cancellation, VAD, and CNG • Static or dynamic jitter buffer • Various classified services: CID, call waiting, call forward, and call transfer. • SIP (RFC3261) and H.248 (MEGACO v2) voice protocols • Common structure and easy replacement. If VoIP access is enabled, the ONT, through the Ethernet interface, supports connecting to the addition box of the external network.
OAM	<ul style="list-style-type: none"> • OMCI management and configuration, G984.4/G988 standards, and China Telecom GPON technical specifications. • OLT management and local Web management • Interface Up/Down and power failure alarms • Thresholds of optical module status parameters and query of the current value • Various services, including Ethernet, WLAN, VoIP, and RF • Alarm and performance monitoring • Mirror-downloading, activating, and restarting software remotely through the OLT • 2 software mirroring inventories, and checking software integrity
IP routing and firewall	<ul style="list-style-type: none"> • Multiple WAN interfaces • WAN connection <ul style="list-style-type: none"> - PPPoE - DHCP - Static configuration • DHCP Server • DHCP Relay • NAT • NAPT • Interface forwarding, static route, ALGs, UPnP, firewall, DMZ, DDNS, NTP, and IGMP Proxy

Ethernet bridge	<ul style="list-style-type: none"> • Wire-speed forwarding • Hardware-based priority queues support CoS in both the uplink and downlink. • IEEE 802.1q virtual switching • IEEE 802.1d bridge • Up to 2K MAC addresses and 4K VLAN groups • Up to 256 multicast groups • Adding/Removing VLAN tag to/from packets of the Ethernet interface • Mapping from IP ToS/DSCP to IEEE 802.1p • CoS based on UNI, VLAN-ID, 802.1p bit, and ToS/DSCP • IEEE 802.1p marking and remarking • IGMPv1/v2 Snooping • Rate limiting on broadcast/multicast packets • MAC address limit
Interface attributes	
GPON interface	<ul style="list-style-type: none"> • Interface type (SMF): SC/APC for the PON interface • Transmission rate: 1.25 Gbit/s in the uplink and 2.5 Gbit/s in the downlink • Central wavelength: 1310 nm for Tx and 1490 nm for Rx • Tx optical power: 0–4 dBm • Maximum Rx sensitivity: -28 dBm • Overloading optical power: -8 dBm
GE interface	<ul style="list-style-type: none"> • 10/100/1000Base-T RJ45 Ethernet interface • Auto-negotiation or manual configuration of the Ethernet interface • Auto-MDI/MDIX
WLAN	<ul style="list-style-type: none"> • IEEE 802.11b/g/n • 2.4 GHz • MIMO: 2×2 • Multiple SSIDs • 64-bit and 128-bit WEP • WPA and WPA-PSK • WPS for WiFi switching

POTS interface	<ul style="list-style-type: none"> • RJ-11 interface • Balanced ringing, 55 V RMS • DTMF dialup • Multiple coding schemes <ul style="list-style-type: none"> - G.711 (μ-law and A-law) - G.729 (A and B) - G.723.1 • Echo cancellation • VAD and CNG • SIP (RFC3261) • SDP (RFC2327) • RTP (RFC3550/3551) • RFC2833 DTMP coding or SIP INFO method • Multiple classified services, CID, call waiting, call forwarding, call transfer, call switching, three-way calling, classified ringing • G.711 faxes, modem, and TTY devices • T.38 fax • Configurable dial-up plan • Configurable rings for different countries • DHCP Client and static IP address
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▼ Typical applications



Networking description

- Use the ONU directly in the user's home.
- Use the high-capacity and high-density ISCOM6800 to access huge services
- The ODN design adopts thin coverage, with a high cost in the early phase
- Actual installation rate is the key to profit.
- Provide high-bandwidth services for users and support various emerging services
- The ONU supports offline configurations, plug and play, thus able to speeding up service activation.
- Various means for locating faults (broken fiber, power failure, and loop)
- Guarantee user experiences, improve renewal rate, and increase customer profit.

Ordering information

Model	Version	Description
ISCOM HT803G-W-05	T.00(GJ01)	One GPON interface, four 10/100/1000 Mbit/s Ethernet electrical interfaces, two FXS voice interfaces, one USB interface, WLAN, and American power adapter
ISCOM HT803G-W-07	T.00(GJ01)	One GPON interface, four 10/100/1000 Mbit/s Ethernet electrical interfaces, two FXS voice interfaces, one USB interface, WLAN, and European power adapter
ISCOM HT803G-W-08	T.00(GJ01)	One GPON interface, four 10/100/1000 Mbit/s Ethernet electrical interfaces, two FXS voice interfaces, one USB interface, WLAN, and Brazilian power adapter