

# ISCOM HT803G GPON optical access terminal

## ▼ Introduction

The ISCOM HT803G, designed by Raisecom for FTTx, is an all-data ONU. It provides 1 uplink GPON optical interface and 4 downlink GE interfaces, thus meeting uplink and downlink bandwidth requirements in the PON+LAN scenario. At present, sharing one ONU (1Gbit/s bandwidth) by multiple users can reduce construction difficulties and maintenance cost and improve ARPU.

The ISCOM HT803G adopts a plastic shell and an external power adapter, thus featuring small size and low weight.



ISCOM HT803G

## ▼ Features

- Provide 4 GE interfaces, thus meeting uplink and downlink bandwidth requirements in the PON+LAN scenario
- Adopt a plastic shell and an external power adapter, thus making it look elegant in outlook.
- Comply with ITU-T G.984/G.988 standards.
- Provide 1.25 Gbit/s uplink bandwidth, 2.5 Gbit/s downlink bandwidth, and powerful QoS features, thus meeting bandwidth requirements for various services.
- Provides 4 VLAN modes (transparent transmission, Tag, Trunk, and mapping) and 2 multicast modes (IGMP Snooping and controllable multicast), thus meeting broadband and live streaming services.
- Support multiple management modes (Telnet, Web, Console, and OMCI), and uniform NMS, thus facilitating device management and maintenance.
- Support batch configurations, offline configurations, profile configurations, and plug and play of the ONU, thus accelerating service activation.
- Provide various LEDs on the panel to indicate the device status.

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- Support reporting various alarms (Dying Gasp, optical module DDM, and loop), thus facilitating fault location and clearance.

▼ Specifications

Physical features	
Dimensions	140 mm (Length) × 105 mm (Width) × 33 mm (Height)
Weight	< 0.3 kg
Maximum power consumption	< 5 W
Power supply	12 VDC, 1 A
Operating temperature	0–50 °C
Operating humidity (RH)	10%–93% (non-condensing)
Altitude	≤ 5000 m
Software features	
GPON	<ul style="list-style-type: none"> <li>• Support ITU-T G.984.x (1, 2, 3, and 4) and G.988.</li> <li>• Support 32 T-CONTs and 128 GEMs.</li> <li>• Support multiple authentication modes with the OLT, such as SN, password, and LOID.</li> <li>• Support DBA of the OLT.</li> <li>• Support silence, with the time of 60s.</li> <li>• Support AES-128 encryption.</li> </ul>
Ethernet interface	<ul style="list-style-type: none"> <li>• Support 10/100 Mbit/s auto-negotiation and 1000 Mbit/s full duplex and flow control.</li> <li>• Support statistics of unicast packets, multicast packets, and broadcast packets on the interface.</li> <li>• Support configuring MTU to 1518–2030, with the MTU being 1518 by default.</li> <li>• Support interface-based storm control over DLF packets, unknown multicast packets, and broadcast packets.</li> </ul>
MAC address	Support MAC addressing learning and aging.
Loop detection	<ul style="list-style-type: none"> <li>• Support shutting down an interface and sending a link down trap when a loop occurs on the interface.</li> <li>• Support restoring an interface and sending a link up trap when a loop is</li> </ul>

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	eliminated on the interface.
VLAN	<ul style="list-style-type: none"> <li>• Support IEEE 802.1Q.</li> <li>• Support CTC VLAN modes: transparent transmission, Tag, Trunk, and mapping.</li> </ul>
QoS/ACL	<ul style="list-style-type: none"> <li>• Support classifying Layer 2 traffic by matching fields, such as the destination MAC address, source MAC address, VLAN ID, and CoS.</li> <li>• Support classifying Layer 3 traffic by matching fields, such as the destination IP address, source IP address, and type of IP protocol.</li> <li>• Support configuring actions for traffic classification based on QoS or ACL.</li> <li>• Support SP, WRR, or WFQ queue scheduling.</li> </ul>
Multicast	<ul style="list-style-type: none"> <li>• Support IGMP Snooping.</li> <li>• Support configuring multicast VLANs.</li> <li>• Support multicast immediate leave.</li> </ul>
Maintenance and management	<ul style="list-style-type: none"> <li>• Support OMCI management and ITU-T G.984/G.988 and China telecom GPON technical specifications.</li> <li>• Support OLT management and Web management.</li> <li>• Support interface Up/Down alarms, and power failure alarm.</li> <li>• Support configuring and querying thresholds of optical module parameters.</li> </ul>
<b>GPON interface parameters</b>	
Standard	ITU-T G.984/G.988
Rate	<ul style="list-style-type: none"> <li>• Uplink: 1.25 Gbit/s</li> <li>• Downlink: 2.5 Gbit/s</li> </ul>
Transmission distance	≤ 20 km
Interface type	SC/PC
Cable type	SMF
Central wavelength	<ul style="list-style-type: none"> <li>• Tx: 1310 nm</li> <li>• Rx: 1490 nm</li> </ul>

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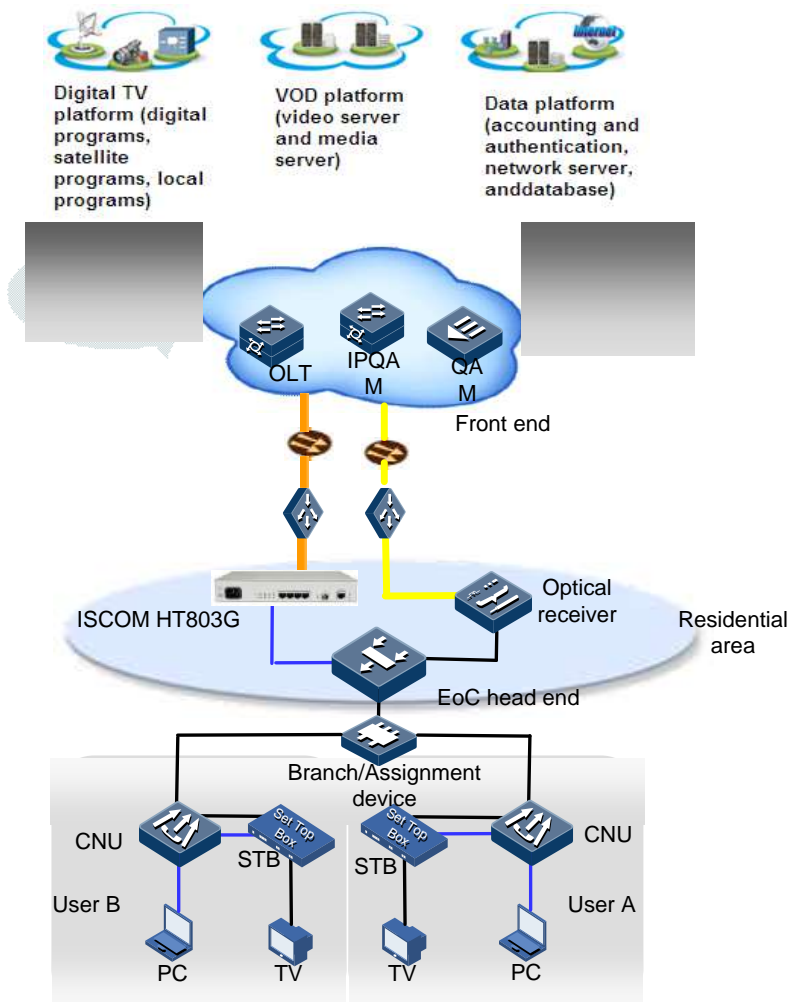
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▼ Typical application



**Networking highlights**

- The ISCOM HT803G is installed in the corridor of residential buildings. It is connected upstream to the OLT and downstream to the EoC head end.
- The EoC head end is connected upstream to the optical receiver and downstream to EoC terminals (CNU) of multiple users through the coaxial cable and branch/assignment device.
- The Ethernet interface and RF interface on the CNU can be connected to the PC and STB respectively.
- When a user is surfing on the Internet or demanding a video program, data streams are forwarded through a path of OLT-ONU-EoC head end-CNU-PC/STB.
- When a user is watching a TV program, TV data are forwarded through a path of IPQAM-optical receiver-CNU-STB-TV.

**Ordering information**

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Model	Version	Description
ISCOM HT803G-05	T.00(GJ01)	1 GPON interface, 4 GE electrical interfaces, SC/APC optical interface, plastic-shell, 12 VDC/1 A, external American power adapter
ISCOM HT803G-07	T.00(GJ01)	1 GPON interface, 4 GE electrical interfaces, SC/APC optical interface, plastic-shell, 12 VDC/1 A, external European power adapter
ISCOM HT803G-08	T.00(GJ01)	1 GPON interface, 4 GE electrical interfaces, SC/APC optical interface, plastic-shell, 12 VDC/1 A, external Brazilian power adapter

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