ISCOM HT803 EPON Home Terminal

### Introduction

The ISCOM HT803 is a new-generation product with plastic shell developed by Raisecom to meet the FTTH scenario. It provides one 1000 Mbit/s LAN interface, three 100 Mbit/s LAN interfaces, which can be directly connected to the user laptop or computer, providing high-bandwidth Internet access. Featuring small size and light weight, it is easy to be installed in a splice box and can facilitate the upgrade and reconstruction of original networks. Adopting an American or European power adapter and 12 V power supply and featuring low power consumption, it is environmentally friendly, as shown below.

### ISCOM HT803

- Small size, elegance, light weight, suitable for home use
- Comply with IEEE 802.3ah and China Telecommunication Industry Standards.
- Support multiple management modes, such as OLT remote management and EMS and provide abundant alarms, which reduces the location time and maintenance cost.
- It is cost-effective, which reduces the network construction cost of a single unit in the FTTH scenario and is suitable for large scale promotion.
- It has rich functions, which can be preconfigured according to different customers and provinces, thus implementing plug and play and facilitating service activation and maintenance.
- Pass the carrier interworking and centralized procurement test, which is a guarantee for interworking with OLTs from other companies.
## Specifications

### Hardware features

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions</td>
<td>140 mm (Length) × 105 mm (Width) × 33 mm (Height)</td>
</tr>
<tr>
<td>Weight</td>
<td>&lt; 1 kg</td>
</tr>
<tr>
<td>Maximum power consumption</td>
<td>&lt; 5 W</td>
</tr>
<tr>
<td>Power adapter input</td>
<td>• 100–240 VAC&lt;br&gt;• 50/60Hz</td>
</tr>
<tr>
<td>Power adapter output</td>
<td>• 12 VDC&lt;br&gt;• 1 A</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>0–50°C</td>
</tr>
<tr>
<td>Operating humidity</td>
<td>10%–93% (non-condensing)</td>
</tr>
<tr>
<td>Altitude</td>
<td>≤ 5000 m</td>
</tr>
</tbody>
</table>

### Software features

#### Ethernet interface
- Support auto-negotiation, flow control, and rate limiting on the interface.
- Support interface isolation.
- Support gathering statistics of unicast and multicast packets received and sent by the interface.
- Support configuring CIR, CBS, PIR, and PBS.
- Support configuring the MTU, which is 1518 bytes by default.

#### MAC address
- Support configuring the aging time of MAC addresses and querying and clearing dynamic MAC addresses.
- Support storm control over DLF, unknown multicast and broadcast packets.

#### Loop detection
- Support detecting loops among UNIs on the same ONU or on different ONUs (does not detect loops among ONU uplink interfaces).

#### VLAN
- Support IEEE 802.1Q.
- Support 4094 concurrent VLANs.
- Support CTC VLAN mode.
- Support VLAN Stacking which complies with the IEEE 802.1ad.

#### QoS/ACL
- Support Layer 2 traffic classification match field, such as destination MAC address, original MAC address, VLAN ID, CoS, and Ethernet type.
- Support Layer 3 traffic classification match field, such as destination IPv4 address, original IPv4 address, IP, and DSCP.
- Support Layer 4 traffic classification match field, such as TCP source interface, TCP destination interface, UDP source interface, and UDP destination interface.
- Support QoS and ACL traffic classification action.
- Support priority scheduling, such as SP and WFQ.

### Multicast
- Support IGMP/MLD Snooping.
- Support transmitting multicast packets transparently.

### DHCP
- Support DHCP Snooping.

### PPPoE
- Support PPPoE Relay.

### Partner
- Support discovering partner devices and querying SNMP configurations.

### Maintenance and management
- Support managing the OLT, Web, and CLT.
- Support interface UP/DOWN, and power failure alarms.
- Support querying information about the optical module.
- Support querying the memory and CPU utilization rate.

### Parameters of the EPON interface

<table>
<thead>
<tr>
<th>Standard</th>
<th>IEEE802.3ah</th>
</tr>
</thead>
</table>
| Rate              | Uplink: 1.25 Gbit/s  
|                   | Downlink: 1.25 Gbit/s |
| Transmission distance | ≤ 20 km         |
| Interface type    | SC/PC             |
| Fiber type        | Single-mode fiber |
| Central wavelength| Tx: 1310 nm  
|                   | Rx: 1490 nm       |
Typical applications

Networking description

- Install ONUs directly to homes.
- Implement mass access with the large-capacity and high-density ISCOM6800.
- Adopt a small scale coverage in designing the ODN with a high cost in early stage.
- The actual installation rate is the key for profits.
- Provide large granularity bandwidth, which supports implementing various new services.
- Support offline configuration and plug and play, thus accelerating the service activation.
- Support multiple location modes (fiber breakage, power failure, and loop).
- Guarantee the user experience, thus improving user renewal rate and enterprise income.

Ordering information

<table>
<thead>
<tr>
<th>Model</th>
<th>Version</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISCOM HT803-05</td>
<td>T</td>
<td>EPON uplink, 1 GE interface, 3 FE interfaces, plastic shell SFU, standard American power adapter</td>
</tr>
<tr>
<td>ISCOM HT803-07</td>
<td>T</td>
<td>EPON uplink, 1 GE interface, 3 FE interfaces, plastic shell SFU, standard European power adapter</td>
</tr>
</tbody>
</table>