The ISCOM HT803-W is an EPON uplink home gateway. It provides one GE interfaces, three FE interfaces, two FXS voice interfaces, and one USB interface, and supports WLAN. It is applicable to FTTH scenarios, with appearance as below.

- Elegant appearance, low power consumption, and good heat dissipation
- Highly cost-effective, widely applicable to FTTH networking
- Integrated with EPON 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
## Specifications

### Hardware features

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions</td>
<td>174 mm (Length) × 129 mm (Width) × 38 mm (Height)</td>
</tr>
<tr>
<td>Weight</td>
<td>&lt; 0.4 kg</td>
</tr>
<tr>
<td>Power consumption</td>
<td>≤ 18 W</td>
</tr>
<tr>
<td>Power adapter input</td>
<td>100–240 VAC (50/60 Hz)</td>
</tr>
<tr>
<td>Power adapter output</td>
<td>12 VDC, 2 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>
</tbody>
</table>

### Software features

**Data**
- The ONU provides one 10/100/1000 and 3 x 10/100 Base-T Ethernet interfaces:
  - 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**
- 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 HT803-W can purposely choose to send multicast data streams upon detection of a member joining and leaving the multicast group.

**OAM**
- IEEE 802.3ah and China Telecom EPON technical specification standard management interface.
- 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
- Multiple WAN interfaces
- WAN connection
  - 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
- 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

<table>
<thead>
<tr>
<th>Interface attributes</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EPON interface</strong></td>
<td>Interface type (SMF): SC/APC for the PON interface</td>
</tr>
<tr>
<td></td>
<td>Transmission rate: 1.25 Gbit/s in both the uplink and downlink</td>
</tr>
<tr>
<td></td>
<td>Central wavelength: 1310 nm for Tx and 1490 nm for Rx</td>
</tr>
<tr>
<td></td>
<td>Tx optical power: 0–4 dBm</td>
</tr>
<tr>
<td></td>
<td>Maximum Rx sensitivity: -27 dBm</td>
</tr>
<tr>
<td></td>
<td>Overloading optical power: -3 dBm</td>
</tr>
<tr>
<td><strong>GE interface</strong></td>
<td>10/100/1000Base-T RJ45 Ethernet interface</td>
</tr>
<tr>
<td></td>
<td>Auto-negotiation or manual configuration of the Ethernet interface</td>
</tr>
<tr>
<td></td>
<td>Auto-MDI/MDIX</td>
</tr>
<tr>
<td><strong>FE interface</strong></td>
<td>10/100Base-T RJ45 Ethernet interface</td>
</tr>
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</tr>
<tr>
<td></td>
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</tr>
</tbody>
</table>
| WLAN | - IEEE 802.11b/g/n  
|      | - 2.4 GHz  
|      | - MIMO: 2x2  
|      | - Multiple SSIDs  
|      | - 64-bit and 128-bit WEP  
|      | - WPA and WPA-PSK  
|      | - WPS for WiFi switching  |
### Typical applications

- **CATV**
- **IPTV**
- **Internet**
- **NGN**
- **PSTN**

The ONU supports offline configurations, plug and play, thus able to speed up service activation.

### 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 speed 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

<table>
<thead>
<tr>
<th>Model</th>
<th>Version</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISCOM</td>
<td>HT803-W-05</td>
<td>One EPON interface, one 10/100/1000 Mbit/s Ethernet electrical interface, two FXS voice interfaces, one USB interface, WLAN, and American power adapter</td>
</tr>
<tr>
<td>ISCOM</td>
<td>HT803-W-07</td>
<td>One EPON interface, one 10/100/1000 Mbit/s Ethernet electrical interface, two FXS voice interfaces, one USB interface, WLAN, and European power adapter</td>
</tr>
</tbody>
</table>