Build open networks, connect global intelligence, and drive digital prosperity

MiNi type
Box-type GPON OLT device
ISCOM6810-GP01/02


ISCOM6810-GP01


ISCOM6810-GP02

Product Overview

ISCOM6810-GP01 and ISCOM6810-GP02 are MiNi-type 1-port and 2-port box-type GPON OLT devices launched by Raisecom Technology Co., Ltd. These products feature robust GPON access capabilities and carrier-grade reliability. They support rich Layer 3 functions and offer WEB management for small and micro customers, meeting the requirements for low-density, long-distance fiber access.

Highlights

➢ High integration and flexible networking

- 1U height, integrated design for easy installation
- Supports 1 or 2 GPON ports, 2 10GE optical interfaces, and 4 GE electrical interfaces, with wire-speed forwarding capability
- Provides users with multiple service access including broadband, voice, and IPTV, meeting comprehensive access requirements in various industries

➢ Carrier-grade reliability

- Supports 1 plus 1 power card redundancy protection
- Supports STP, RSTP, and MSTP spanning tree protocols
- Supports Type B and C protection with switching performance meeting carrier-grade requirements
- Supports Ethernet ring protocol with switching performance up to 50 ms

➢ Rich functional features

- Supports IPv4 and IPv6 dual stack and comprehensive dynamic routing protocols
- Supports IGMP and MLD Snooping, Proxy, MVR, and controllable multicast
- Comprehensive QoS functions, including Dynamic Bandwidth Allocation, priority control, multiple traffic classification mechanisms, and multi-queue scheduling technologies
- Comprehensive ACL functions, including L2, L3, L4, and user-defined ACLs

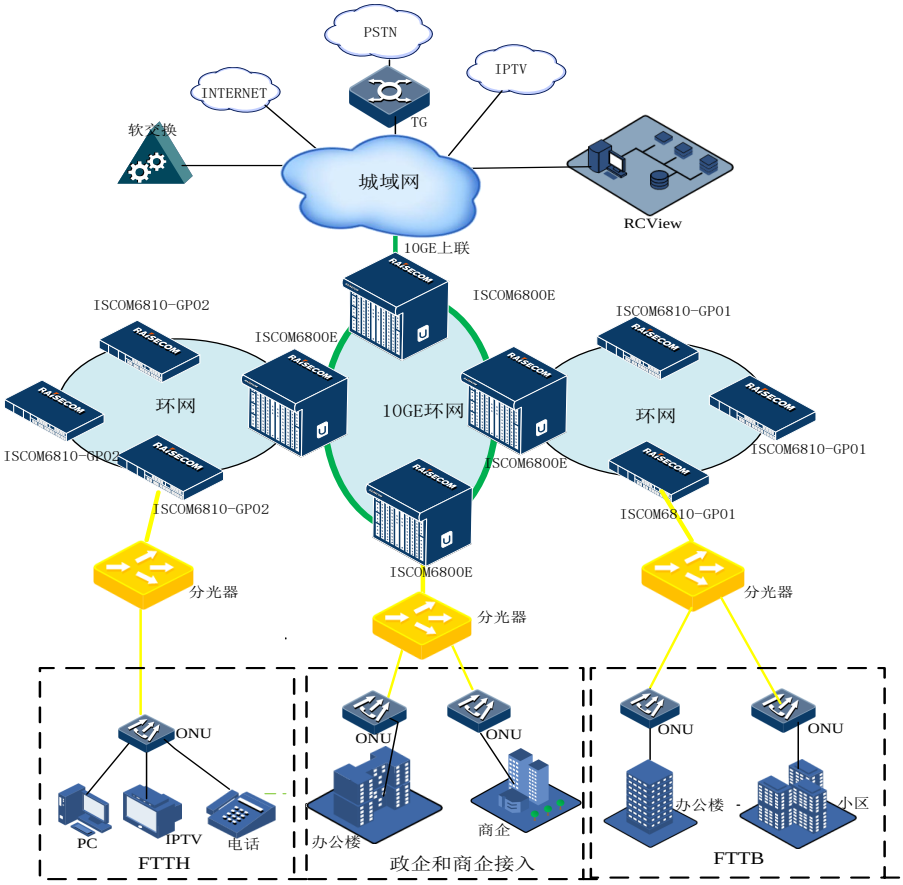
➢ Simplified O&M and easy management

- Supports diverse management and maintenance methods such as CLI, Telnet, RCView, and WEB for convenient device management
- Supports features like RMON and Syslog for daily network diagnosis and maintenance

➢ Green and energy-saving design

- Low-power design, power consumption of the entire device less than 21 W
- The fan speed can be intelligently adjusted based on temperature, which improves fan lifespan and reduces noise, achieving energy-saving effects

Application



Note: ISCOM6810-GP04L and ISCOM6800E ring application

In this application scenario, ISCOM6810-GP01 and GP02 can form a 10G Ethernet ring with Raisecom ISCOM6800E, providing customers with reliable access services. With switching time less than 50 ms, this not only provides ring protection but also saves trunk fiber resources and meets customers' requirements for high-bandwidth transmission.

ISCOM6810-GP01 and GP02 are ideally suited for operators and ISP customers to provide various typical broadband access, IPTV, leased line access, and video monitoring services in low-density user areas such as villa districts, suburbs, towns, and rural areas.

Features

➢ MAC

- Supports static, dynamic, and blackhole MAC addresses
- Supports MAC address flapping management
- Supports port security MAC and MAC address limit

➢ VLAN

- Supports MAC-based, protocol-based, IP subnet-based, and port-based VLANs
- Supports Access, Trunk, and Hybrid modes
- Supports basic QinQ, flexible QinQ, and VLAN Mapping function (1 to 1 and N to 1)

➢ Multicast

- Supports IGMP v1, v2, and v3, IGMP v1, v2, and v3 Snooping, and MLD Snooping
- Supports port-based and user-based fast leave
- Supports IGMP MVR
- Supports IGMP and MLD Proxy

➢ QoS and ACL

- Supports rate limiting based on port ingress and egress directions, supports HCAR
- Each port supports 8 queues, supports priority mapping
- Supports port and queue shaping, supports traffic classification and traffic policy
- Supports SP, WRR, DRR, SP plus WRR, and SP plus DRR queue scheduling modes
- Supports WRED congestion control

➢ Reliability

- Supports manual aggregation and static LACP
- Supports ERPS ring protection protocol G.8032
- Supports STP, RSTP, and MSTP
- Supports port backup and port isolation

➢ IP Routing

- Supports IPv4 and IPv6 static routing
- Supports IPv4 dynamic routing protocols such as RIP, OSPF, ISIS, and BGP
- Supports IPv6 dynamic routing protocols such as RIPng and OSPFv3

IPv6 Features

- Supports dual stack
- Supports IPv6 Ping, IPv6 Tracert, IPv6 Telnet, IPv6 SSH, and IPv6 ftp, tftp, and sftp
- Supports IPv6 SNMP, supports RCView for IPv6 network management
- Supports IPv6 Radius, IPv6 TACACS Plus, IPv6 NTP, and SNTP
- Supports DHCPv6 Client, Server, Snooping, Relay, Option 18, and Option 37
- Supports IPv6 Source Guard, ND, and ND Snooping
- Supports VRRPv3

DHCP

- Supports DHCPv4 and DHCPv6 Client and Server
- Supports DHCPv4 and DHCPv6 Snooping
- Supports DHCPv4 and DHCPv6 Relay
- Supports DHCPv4 option 61, option 82, DHCPv6 option 18, and option 37

Security Features

- Supports AAA user domain-based management, 802.1x authentication, and RADIUS authentication
- Supports port-based and VLAN-based storm suppression
- Supports whitelist, port security MAC, and MAC address learning limit
- Supports IP and ARP attack prevention including IPv4 and IPv6 Source Guard, DAI, and ND Snooping
- Supports SSH V2.0, SFTP, and HTTPS
- Supports CPU protection
- Supports anti-DoS and anti-ICMP attacks

Loop Protection

- Supports STP, RSTP, and MSTP
- Supports ERPS G.8032

Management and Maintenance

- Supports diverse management methods such as CLI command line, SNMPv1, v2c, v3, Telnet, SSH 2.0, and WEB
- Supports Raisecom RCView network management system
- Supports system logs and graded alarms, supports Dying Gasp alarm function
- Supports unified user management, group-based, domain-based, and time-based authorization
- Supports system logs and graded alarms
- Supports online device status monitoring, enabling monitoring of key components, system temperature, power modules, and fan modules

➢ Specifications

- Switching Capacity

  53 Gbps for GP01 and 58 Gbps for GP02

- MAC Address Table

  16 K

- Network Side Interfaces

  2 10GE SFP and 4 GE RJ45

- User Side Interfaces

  1 or 2 GPON ports

- PON Splitting Ratio

  1 colon 128

- Power Supply

  AC voltage 110V and 220V, voltage range 100V to 240V at 50Hz and 60Hz

  DC minus 48V and minus 60V, voltage range minus 36V to minus 72V

- Dimensions

  220 mm W x 180 mm D x 44 mm H

- Environment

  Operating temperature minus 10 degrees Celsius to 55 degrees Celsius

  Operating humidity 10 percent RH to 90 percent RH, non-condensing

- Weight

  Less than 1.2 kg

- Maximum Power Consumption

  Less than 21 W

➢ Standards and Protocols

- Supports ITU-T 984 and 988
- ETSI EN 300 019-1-1 to 3 IEC 60068-2 IEC 60721-2-6 IEC 60721-3-1 to 3
- ETSI EN 300 753 NEBS GR-63-CORE RoHS IEC 61000-4-2 to 6 IEC 61000-4-29
- EN 61000-4-2 to 6 EN 61000-4-29 ETSI EN 300 386 V1.6.1 EN 55022
- ETSI ES 201 468 V1.4.1 VCCI V-3
- EN 55024 EN 55032 ITU-T K.20
- CISPR 22 CISPR 24 ITU-T K.32 ITU-T K.44 FCC part 15
- ICES-003 EN 60950-1 EN 60825-1 to 2 IEC 60825-1 to 2 IEC 60950-1 UL 60950-1

Order Information

Model	Product Description
ISCOM6810-GP01-AC/D	1U box-type GPON device, OLT with integrated management, service switching, and aggregation, featuring 1 GPON port, 2 10GE ports (SFP Plus), and 4 GE ports (RJ45), dual AC power supply
ISCOM6810-GP01-DC/D	1U box-type GPON device, OLT with integrated management, service switching, and aggregation, featuring 1 GPON port, 2 10GE ports (SFP Plus), and 4 GE ports (RJ45), dual DC power supply
ISCOM6810-GP01-AC_DC	1U box-type GPON device, OLT with integrated management, service switching, and aggregation, featuring 1 GPON port, 2 10GE ports (SFP Plus), and 4 GE ports (RJ45), dual power supply (AC and DC)
ISCOM6810-GP01-AC/S	1U box-type GPON device, OLT with integrated management, service switching, and aggregation, featuring 1 GPON port, 2 10GE ports (SFP Plus), and 4 GE ports (RJ45), single AC power supply
ISCOM6810-GP02-AC/D	1U box-type GPON device, OLT with integrated management, service switching, and aggregation, featuring 2 GPON ports, 2 10GE ports (SFP Plus), and 4 GE ports (RJ45), dual AC power supply
ISCOM6810-GP02-DC/D	1U box-type GPON device, OLT with integrated management, service switching, and aggregation, featuring 2 GPON ports, 2 10GE ports (SFP Plus), and 4 GE ports (RJ45), dual AC power supply
ISCOM6810-GP02-AC_DC	1U box-type GPON device, OLT with integrated management, service switching, and aggregation, featuring 2 GPON ports, 2 10GE ports (SFP Plus), and 4 GE ports (RJ45), dual power supply (AC and DC)
ISCOM6810-GP02-AC/S	1U box-type GPON device, OLT with integrated management, service switching, and aggregation, featuring 2 GPON ports, 2 10GE ports (SFP Plus), and 4 GE ports (RJ45), single AC power supply

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