

XGS-PON OLT**ISCOM6810-XC16**

Product Overview

ISCOM6810-XC16 is a small-capacity enhanced XG(S)-Combo PON box-type OLT device launched by Raisecom Technology Co., Ltd. Its power supply and fan both adopt a modular design for easy installation and deployment. This product features robust GPON, XG-PON, and XGS-PON access capabilities and supports rich Layer 3 functions. It offers 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, pluggable fan and power supply, modular design for easy installation, deployment, and component replacement
- The device supports 16 XG(S)-PON COMBO ports, 2 100GE optical ports, and 4 10GE optical ports, 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, C, and D 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

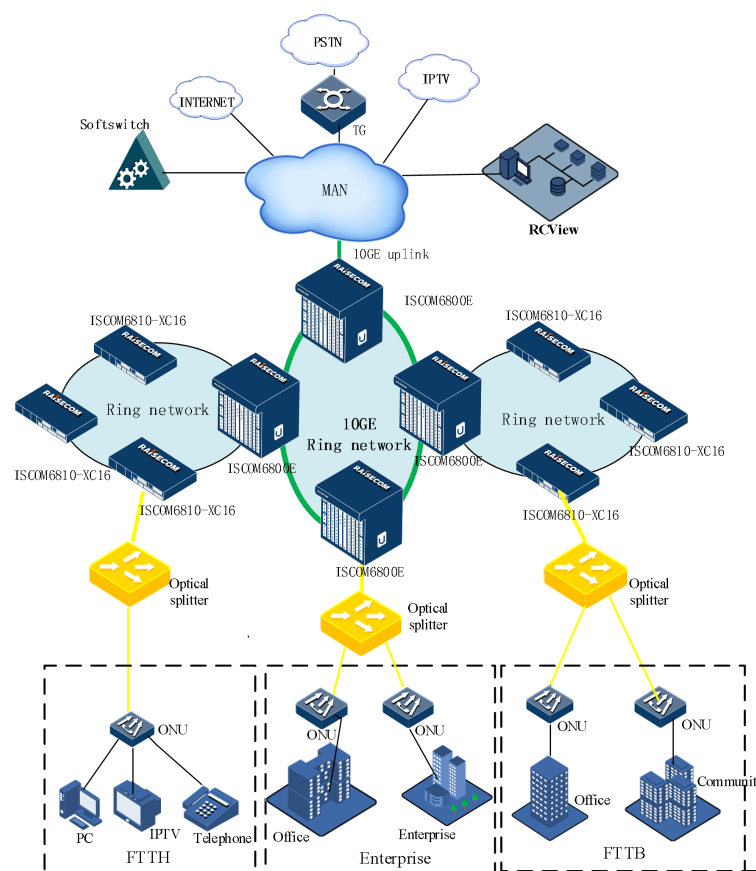
➤ **Simplified O&M and easy management**

- 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 101 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-XC16 and ISCOM6800E ring application

In this application scenario, ISCOM6810-XC16 can form an Ethernet ring with Raisecom ISCOM6800E, providing customers with reliable access services. At the same time, the ISCOM6800E devices at aggregation points in each area can be formed into a 10G Ethernet ring 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-XC16 is 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

Function	Features
MAC	- Supports static, dynamic, and blackhole MAC addresses - Supports MAC address flapping management - Supports port security MAC and MAC address limit
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
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)
QoS/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
Standards and Protocols	ITU-T G.984、ITU-T G.987 ITU-T G.988、ITU-T G.9807.1 ITU-T K.20、ITU-T K.32、ITU-T K.44 ETSI EN 300 019-1-1~3、ETSI EN 300 753 ETSI EN 300 386 V1.6.1、ETSI ES 201 468 V1.4.1 IEC 60068-2、IEC 60721-2-6、IEC 60721-3-1~3 IEC 61000-4-29、EN 61000-4-2~6 EN 61000-4-29 EN 55022、EN 55024、EN 55032 EN 60950-1、EN 60825-1~2 CISPR 22、CISPR 24 FCC Part 15、VCCI V-3、ICES-003 NEBS GR-63-CORE、RoHS

Specifications

Item	Parameter Description
Slot Count	4
Main Control & Uplink Board	1 (Removable)
Switching Capacity	880Gbps
Forwarding Rate	Wire-speed on all ports
PON Interfaces	16*XG(S)-Combo PON
PON Split Ratio	1:384
Fans	1
Power Supply	AC: 110/220V nominal, range 100–240V (50/60Hz) DC: -48/-60V nominal, range -36--72V
Environmental Specifications	Operating Temperature: -10 to 55°C Operating Humidity: 10%–90% RH (non-condensing)
Dimensions (W×D×H)	440mm(W)×266mm(D)×44.5mm(H)
Weight	< 6KG
Maximum Power Consumption	< 195W

Order Information

Model	Product Description
ISCOM6810-XC16-AC/D	1U box-type XPON OLT device, OLT with integrated management, service switching, and aggregation, featuring 16 XG(S)-Combo PON ports, 2 100GE ports (QSFP28), and 4 10GE ports (SFP Plus), dual AC power supply
ISCOM6810-XC16-DC/D	1U box-type XPON OLT device, OLT with integrated management, service switching, and aggregation, featuring 16 XG(S)-Combo PON ports, 2 100GE ports (QSFP28), and 4 10GE ports (SFP Plus), dual DC power supply (minus 48V and minus 60V)
ISCOM6810-XC16-AC_DC	1U box-type XPON OLT device, OLT with integrated management, service switching, and aggregation, featuring 16 XG(S)-Combo PON ports, 2 100GE ports (QSFP28), and 4 10GE ports (SFP Plus), dual power supply (AC and DC minus 48V and minus 60V)



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