ISCOM5508Q-GP outdoor OLT

Introduction

The ISCOM5508Q-GP is an outdoor GPON OLT with cast aluminum and integrated EDFA targeted for outdoor applications scenarios. In the uplink of input, it supports 2 ways (backup) of 1550 nm CATV optical signals, two 1000 Mbit/s electrical interfaces, two 1000 Mbit/s optical interfaces, and two 10 Gbit/s optical interfaces. In the downlink of output, it supports 4 or 8 ways (WDM is optional. GPON and CATV signals can be output in a separate or combined mode). It adopts an all cast aluminum chassis with wide range of temperature, high lightning protection level, and modular design, so it can be configured flexibly.

The ISCOM5508Q-GP has powerful GPON access capabilities and carrier-grade reliability, supports powerful security functions (such as ACL and anti-DoS attack) and selective QinQ, and provides good management, maintenance, and monitoring functions, and rich service features and flexible networking modes, thus meeting requirements for low-density and long-distance fiber access.

ISCOM5508Q-GP

Features

➢ High integration and flexible networking

- Adopt cast aluminum shell, and provide 1 GPON OLT card, 1 EDFA card (embedded WDM is optional), and power supply. Modular design facilitates installation and maintenance.

- Optionally support 4 or 8 ways of output (GPON and CATV signals can be output in a separate or combined mode).

- Provide two 1000 Mbit/s electrical interfaces, two 1000 Mbit/s optical interfaces, and two 10 Gbit/s optical interfaces in the uplink.

➢ Rich features

- Powerful VLAN features, including selective QinQ, VLAN mapping and aggregation

- Complete QoS, including DBA, priority control, multiple traffic classification mechanisms, and queue scheduling, thus meeting requirements for different QoS of VoIP, video, and Internet services

- Complete ACL, including L2, L3, L4, and user-defined ACL

- Static multicast, IGMP Snooping, IGMP Proxy, IGMP MVR, and controllable multicast

- Static route

- STP/MSTP, link aggregation, DHCP, interface isolation, and other common features

➢ Carrier-grade reliable design

- 2 ways of 1550nm CATV optical signal input for link backup and protection

- Embedded dual power supply redundancy for improving device reliability

- Wide-temperature design for adopting to the -20 to 65 ℃ environment

- IP67 protection level, thus meeting dustproof and waterproof requirements in the outdoor environment

- Low power consumption of the MCC and EDFA card, with overall power consumption less than 85 W, energy saving

➢ Convenient maintenance and management

- Debugging through the Console interface via Bluetooth, thus facilitating maintenance after installation

- Multiple maintenance and management interfaces, supporting in-band and out-of-band management

- Rich alarms, such as door alarms, abnormal optical power alarms, and ONU offline alarms.

Specifications

Hardware features	
Parameter	**Description**
Switching capacity of MCC	92 Gbit/s
Switching and forwarding rate	Wire-speed forwarding on all interfaces
Rate of GPON interfaces	• Uplink: 1.25 Gbit/s • Downlink: 2.5 Gbit/s
Rate of Ethernet interfaces	• GE: 1 Gbit/s • 10GE: 10 Gbit/s
EDFA	• Input wavelength: 1545–1565 nm • Input optical power: -10 to 10 dBm • Output optical power per interface: > 22 dBm
Maximum transmission distance of PON fibers	20 km
Optical splitting ratio	1:128
Software features	
VLAN	• Basic QinQ • Selective QinQ • VLAN mapping
ACL	• ACL based on MAC address • ACL based on IP address • User-defined ACL • ACL MAP
Routing	Static route
QoS	• Trusting CoS or DSCP priority, and flexible mapping from CoS to queues or DSCP to queues • Configuring the CoS or DSCP priority tag for packets matching ACL rules • Modifying 802.1p CoS, DSCP, and IP Precedence • Filtering packets based on flow rule
Multicast	• Static multicast • IGMP Snooping (v1/v2/v3) • MVR (inter-VLAN copy) and MVR Proxy

	• Controllable multicast
Link aggregation	• Link aggregation • Load balancing based on MAC address, IP address, and so on • LACP
Security	• IP Source Guard • DAI • Anti-DoS attack • Storm control
EDFA management	• Querying basic information about EDFA • Querying operating parameters of the CATV module • Configuring the output power per interface on the CATV module • Configuring the alarm threshold of the CATV module • Obtaining the alarm status of the CATV module • Reporting the CATV module status alarm
Physical features	
Overall power consumption per chassis	< 85 W
Power supply mode	Support the following two power supply modes: • 60 VAC power supply (35–85 VAC) • 220 VAC power supply (100–240 VAC)
Operating temperature	-20 to 65 ℃
Weight	< 14 kg
Dimensions	458 mm (Length) × 285 mm (Width) × 174 mm (Height)

Ordering information

Model	Version	Description
ISCOM5508Q-GP-WD8-AC	A	2 ways of input, 8 ways of combined or separate GPON and CATV output, 6 uplink interfaces (two GE electrical interfaces, two GE optical interfaces, and two 10GE optical interfaces), with optional WDM, 220 VAC input