

## ISCOM5508 Optical Line Terminal

ISCOM5508 is the next generation GEAPON OLT product with small volume capacity and 1U plug-in data cards. It provides 12 single-strand PON interfaces for communicating with downlink ONU devices, 4 gigabit Ethernet SFP interfaces and 2 electric interfaces for connecting with uplink switches. It mainly focuses on the professional purchasers. It offers abundant functional characteristics and flexible networking mode for the increasing requirements in optical fiber access of Low density and long distance. ISCOM5508 is deployed in the central office and can be managed through Console, Telnet, SSH, and can be locally or remotely monitored and controllable by SNMP through Raisecom GUI NView platform.

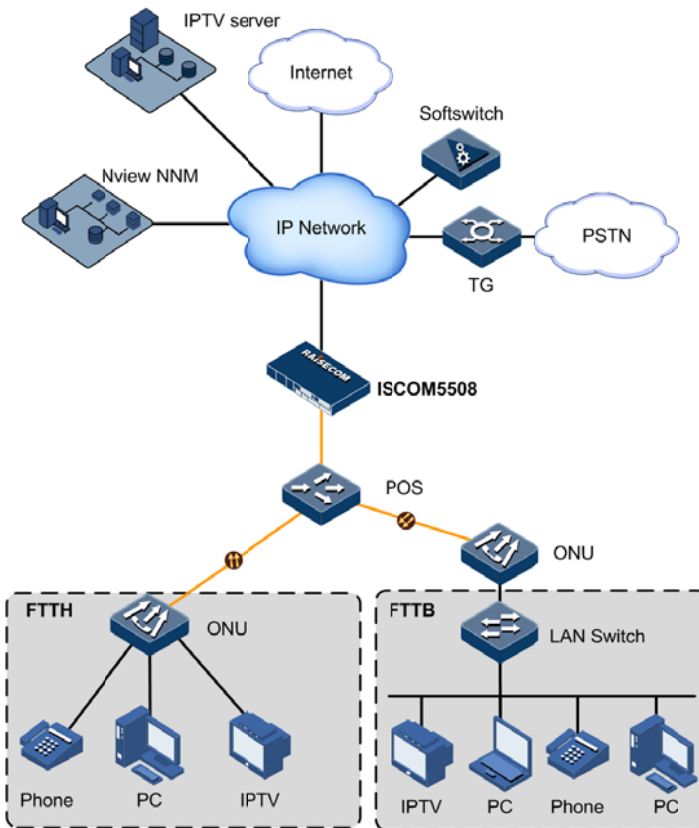


ISCOM5508

### Highlights

<b>Network Security</b>	Advanced ACL、RADIUS、TACACS+、DAI、ERPS、storm-control、IP Source Guard、Port Security MAC、Prevent DOS Attacking; Triple churning; P2P access control;SSHv2; Port isolate;
<b>Line protection</b>	Support uplink-protect including Uplink-ring-protect/dual-homing protect, PON-protect including Type A/B/C/D; ELPS and ERPS;
<b>Ethernet ring</b>	Support ERPA, Up to 8 Ethernet rings, 124 devices in each ring
<b>Failover</b>	Support failover to upstream/downstream
<b>Resiliency &amp;Protection</b>	Ethernet ring protection(ERPS);STP/MSTP; Link Aggregation
<b>Routing</b>	Support static route and default route, RIP v1/v2 and ARP Snooping
<b>Capacity</b>	Each OLT supports up to 768 remote ONUs;
<b>MAC address table</b>	32K MAC address, 1K static MAC address, 1K multicast MAC address; Support MAC address clear/search/trace/copy function
<b>VLAN</b>	Basic VLAN, Basic QINQ, flexible QINQ, VLAN Translation
<b>ONU Authentication</b>	Support five types of authentication mode: None、MAC、SN、Password、SN + Password
<b>Backplane</b>	Up to Bi-directional 36Gbps
<b>Reliability Index</b>	System availability $\geq$ 99.999%, fault probability $\leq$ 1.5%, MTTR $\leq$ 2H, MTBF $\geq$ 100 000H

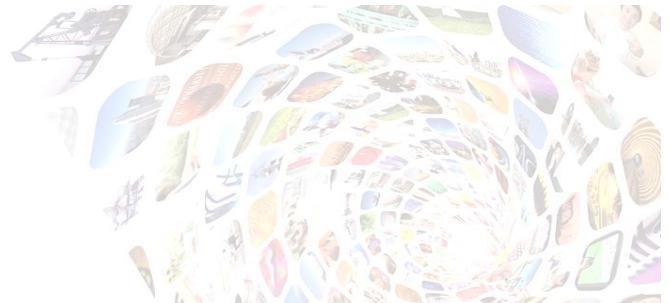
### Typical Application



- Products involved**
- OLT:
    - ISCOM5508
  - ONUs:
    - ISCOM5116
    - ISCOM5216
    - ISCOM5304

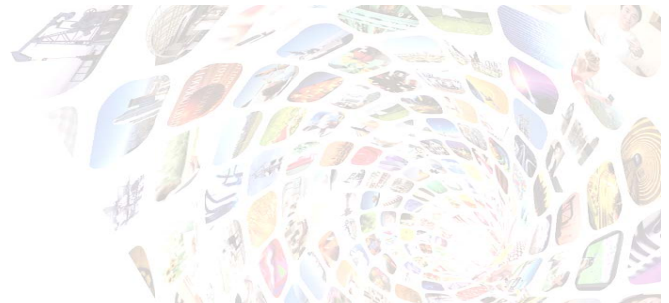
## Features

<b>DBA</b>	Support three forms of DBA: FIR, BIR, PIR; 64kbps granularity
<b>FEC</b>	Support two-way FEC
<b>P2P</b>	P2P Support P2P access control
<b>VLAN</b>	IEEE 802.1Q VLAN: 4094 Concurrent VLANs, VLAN mode: Access and Trunk port-based QinQ, total 10K flexible qinq, 2K VLAN translation;
<b>Link Aggregation</b>	Up to 6 groups and 8 ports per group; Group member max-port-number 26; Load balance based on MAC/IP/MAC+IP; Standard LACP (static only)
<b>Storm Control</b>	Broadcast, multicast, unicast, DLF storm control; Control mode: global, bps, burst; Default burst: 8KB
<b>Mirror</b>	Port-to-Multiport mirroring, Separate mirroring configurations for ingress & egress ports
<b>Link Aggregation</b>	Load balance based on MAC/MAC+IP; Support Manual configuration and static LACP; besides 1:1 Link Backup
<b>STP</b>	STP, MSTP
<b>Port Isolate</b>	Support Layer-2 isolate of Physical Port and designated VLAN port
<b>Transparent Relay</b>	BPDU; LACP; LLDP; STP



## Advanced

OAM	IEEE802.3ah OAM including discovery, link performance, remote loopback, fault detection & performance stats per OAM standards; OAM Active/Passive mode; EFM、CFM and SLA.
System Management	Console/Telnet/NMS/SNMP/SSHv2 management; RMON, 16 Layer 3 interfaces, Bridge MIB (RFC1493);System log;
Maintenance	Debug information output; PING (packet internet groper); Port statistic; Port dynamic statistic
Multicasting	Support more than 1024 multicast groups; IGMP SnoopingV1/V2/V3 ;IGMP Proxy V1/V2/V3; Support static multicast and unknown multicast drop; Multicast VLAN Registration (MVR); Controlled multicasting of CTC
QoS	Support Global trust model、TRUST mode: CoS/TOS/DSCP priority; Global CoS/DSCP to queue mapping; Global queue scheduling based on port; Scheduling mode: SP/WRR/DRR/SP+WRR/SP+DRR; Flow statistic; Flow-based mirror/rate-limit/ redirection/VLAN swapping/rewriting of 802.1p CoS, DSCP, IP Precedence
Ethernet Ring	Support Ethernet ring protection switch (ERPA), Up to 8 Ethernet rings, 124 devices in each ring; switching time≤50ms
ACL	Support L2 - L4 packet filtering based on MAC(source MAC address、destination MAC address) ACL, IP(source IP address、destination IP address) ACL、MAP ACL( CoS、DSCP、VLAN、IP precedence and priority、L4-port、...and other User-designed ) 、Filter Ingress or Egress ACL on port
Safety Features	Client classification and password protection; Binding of MAC address & port; storm-control, RADIUS,TACACS+,DAI,IP Source Guard, Port protection/isolate/backup, Prevent DoS Attacking
LLDP	Discovery remote base on link layer; Get remote basic information
Time Management	Time zone; Time modification; Support SNTP & NTP
DHCP	DHCP Client/Snooping/Server/Option 82/Relay
Port Backup	Port Backup by port or port based on VLAN
Software Upgrade	XMODEM, FTP upgrade in BOOTROM FTP/TFTP



## Specifications

Performance	Backplane Up to Bi-directional 36Gbps
Capacity	128MB DRAM; 32MB flash; 1K IGMP groups
Indicators	Power Supply (flashing); GE port: LINK/ACT; SFP port: LINK/ACT
Physical Interface	Management port: 1 console (RJ45); Client interfaces: 2 x 10/100 Base-TX RJ45 port; Network interfaces: 2x 100/1000Base-X SFP; 4x 10/100/1000MBase-T RJ45; GEPON interfaces: 12x 1000BASE-PX20-D-SP SFP
Power Specs	AC: 220V, 50/60Hz DC: -48V/+24V Full load: ≤250W
User Conditions	Operating temp: 0~50 °C (32~122 °F); Storage temp: -25~70 °C (-13~185 °F); Humidity: 5~90% non-condensing
Dimensions	440(W) x 220(D) x 44.45(H) mm <sup>3</sup>
Weight	≤ 6.0Kg(G.W)

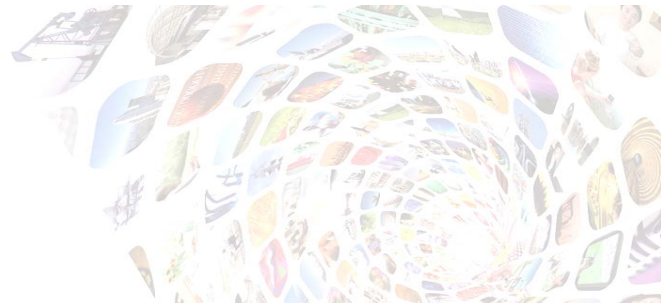
## Compliances

Standards & protocols	IEEE 802.1Q VLAN IEEE 802.3ad Link Aggregation IEEE 802.1ad QINQ IEEE 802.1D Spanning Tree Protocol IEEE 802.1s MSTP RFC 2131 DHCP RFC 2132 DHCP Options IEEE 802.1x Security IEEE 802.1p CoS Prioritization IEEE 802.3x Flow Control IEEE 802.3ah OAM IEEE 802.1ag CFM ITU Y.1731 Services OAM ITU-T G.8021 ITU-T G.8031 RFC1465Static Routing, RFC1058RIPv1/RFC2453RIPv2 IGMP v1/v2/v3 RMON I and II standards SNMPv1/v2c/v3 MEF9/MEF14 G.992.1/G.992.3/G.992.5 G.991.2/G.993.1/G.993.2 RFC 3261/2543、RFC 2327、RFC 3550、 ITU-T H.248.v1/v2/v3 DHCPv4/v6 RFC2131 RFC3315
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## Ordering Information

### ISCOM5508

ISCOM5508-DC/D	Dual DC power supply
ISCOM5508-SMC	OLT SMC,1 console port+1 SNMP port+2 x GE ports + 4 x GE optical ports + 4 x EPON ports
ISCOM5508-EP4	Dual Cards,4 x EPON interfaces per card
1000BASE-PX20-D-SP	PON SFP without digital diagnosis, which is used for ISCOM5508-EP4 line module.
1000BASE-PX20-D-M-SP	PON SFP with digital diagnosis, which is used for ISCOM5508-EP4 line module.



RPA0601 110-240v AC power supply module

RPD0601-48S12 -48v DC power supply module

RPD0601-24S12 +24v DC power supply module

FANS306 Single FAN model

## Appendix Specification of PON interface

Wavelength	RX sensitivity	TX Power	Typical Distance	Overload Point
1490nm	<-27dBm	+2 ~ +7dBm	20KM	>-6dBm