

ISCOM5508 Optical Line Terminal

ISCOM5508 is a compact 1U GEAPON OLT device which supports maximum 12PON ports and 6GE uplink ports. Designed for large enterprise, SME and home users access, it offers rich features to satisfy operators' needs and high reliability. It also offers great flexibility to deliver triple-play services to homes. The device has the unique functionality that quickly deploys a batch of ONUs with ONU-SVR-template, guarantees security management with Radius or TACACS+. Hot-swappable redundant power supply makes the maximum network uptime. Modular design allows the lowest initial CapEx and TCO is going down when the more capacity is required.

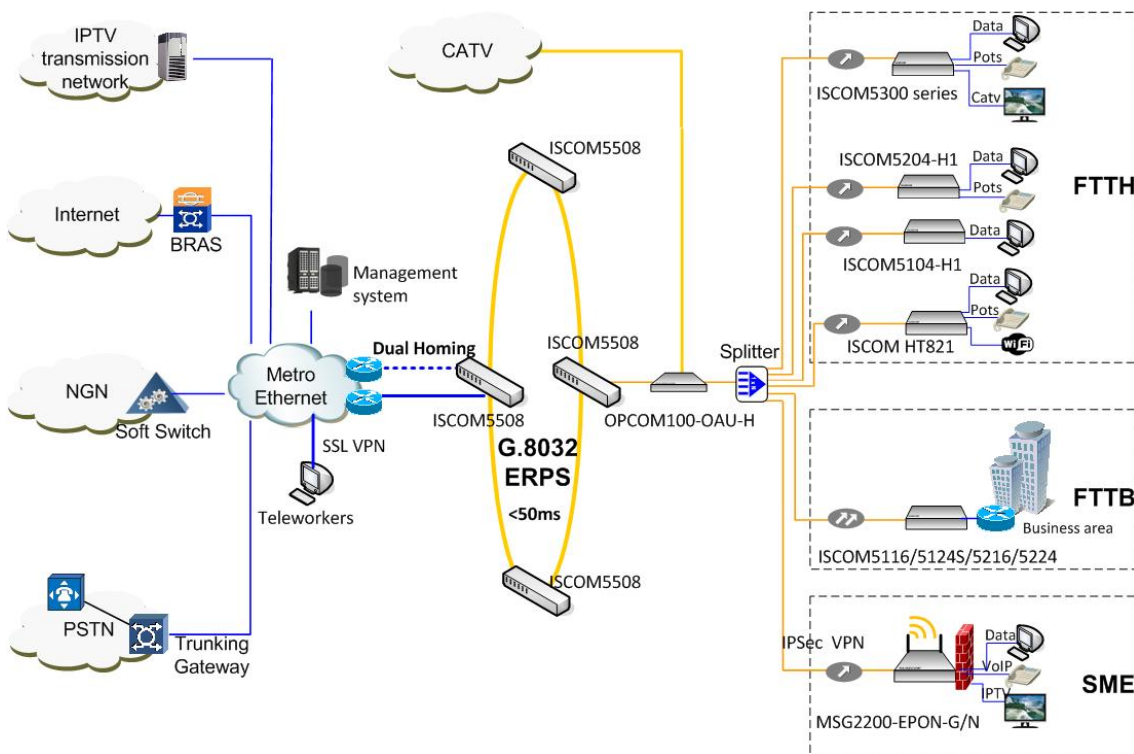


ISCOM5508

Highlights

Network Security	Advanced ACL, RADIUS, TACACS+, DAI, storm-control, IP Source Guard, Port Security MAC, Prevent DOS Attacking; Triple churning; P2P access control; SSHv2; Port isolate
Line protection	Support uplink-protect including Uplink-ring-protect/dual-homing protect, PON-protect including Type A/B/C/D
Ethernet ring	Support G.8032 (ERPS), up to 8 Ethernet rings, 124 devices in each ring
Ethernet OAM	EFM, CFM and SLA
ONU service template	Deploy a batch of ONUs with ONU-SVR-template
IP routing	Support static route, default route and RIP v1/v2
ONUs capacity	Maximum 768 ONUs/per OLT
MAC address table	32K MAC address, 1K static MAC address, 1K multicast MAC address; Support MAC address clear/search/trace/copy function
VLAN	Basic VLAN, Basic QinQ, flexible QinQ, VLAN Translation
ONU Authentication	Support five types of authentication mode: None, MAC, SN, Password, SN + Password
Switching fabric	36Gbps
Reliability Index	System availability $\geq 99.999\%$, fault probability $\leq 1.5\%$, MTTR $\leq 2H$, MTBF $\geq 100\ 000H$

Typical Application



Products involved

- OLT:
 - ISCOM5508
- ONUs:
 - ISCOM5104-H1
 - ISCOM5204-H1
 - ISCOM HT821
 - ISCOM5116/5124S
 - ISCOM5216/5224
 - ISCOM5304
- SME:
 - MSG2200-EPON-G-AC
 - MSG2200-EPON-N-AC
- CWDM:
 - OPCOM100-OAU-H

Features

DBA	Support three forms of DBA: FIR, BIR, PIR; 64kbps granularity
FEC	Support two-way FEC
P2P	P2P Support P2P access control
VLAN	IEEE 802.1Q VLAN: 4094 Concurrent VLANs, VLAN mode: Access and Trunk port-based QINQ, total 10K flexible qinq, 2K VLAN translation;
Link Aggregation	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)
Storm Control	Broadcast, multicast, unicast, DLF storm control; Control mode: global, bps, burst; Default burst: 8KB
Mirror	Port-to-Multiport mirroring, Separate mirroring configurations for ingress & egress ports
Link Aggregation	Load balance based on MAC/MAC+IP; Support Manual configuration and static LACP; besides 1:1 Link Backup
STP	STP, MSTP
Port Isolate	Support Layer-2 isolate of Physical Port and designated VLAN port
Transparent Relay	BPDU; LACP; LLDP; STP
Advanced	
OAM	IEEE802.3ah OAM including discovery, link performance, remote loopback,



	fault detection & performance stats per OAM standards; EFM、CFM and SLA.
System Management	Console/Telnet/NMS/SNMP/SSHv2 management; RMON1,2,3,9, 16 Layer 3 interfaces, Bridge MIB (RFC1493);System log;
Maintenance	Debug information output; PING (packet internet groper); Port statistic; Port dynamic statistic
Multicasting	1024 multicast groups; IGMP SnoopingV1/V2/V3; IGMP Proxy V1/V2/V3; Support static multicast and unknown multicast drop; Multicast VLAN Registration (MVR); MVR proxy
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	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;

Compliances

Standards & protocols	IEEE 802.1Q VLAN IEEE 802.3ad Link Aggregation
----------------------------------	---



Indicators	32MB flash; 1K IGMP groups Power Supply (flashing); GE port: LINK/ACT; SFP port: LINK/ACT		
Physical Interface	Management port: 1 console (RJ45); SNMP port : 1x10/100 Base-T Ethernet; Uplink interfaces: 2 x 10/100/1000MBase-T RJ45; 4x 1000Base-X SFP; GEPON interfaces: 12x GSFP-PX20-DM-R;		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 ITU-T G.8032 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
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 ³		
Weight	≤ 6.0Kg(G.W)		

Ordering Information

ISCOM5508-AC/D	Minimum configuration (dual AC, 2GE+4GE PON SFP slots for uplink, 4PON SFP, 2 PON slots for EP4)
ISCOM5508-DC/D	Minimum configuration (dual DC, 2GE+4GE PON SFP slots for uplink, 4PON SFP, 2 PON slots for EP4)
ISCOM5508-AC_DC	Minimum configuration (AC+DC, 2GE+4GE PON SFP slots for uplink, 4PON SFP, 2 PON slots for EP4)
ISCOM5508-DC/D(+24v)	Minimum configuration (dual DC+24v, 2GE+4GE PON SFP slots for uplink, 4PON SFP, 2 PON slots for EP4)
ISCOM5508-EP4	PON line card with 4PON ports, which can be inserted in any of two PON slots for EP4.
GSFP-PX20DM-R	PON SFP with digital diagnosis, which is used for ISCOM5508-EP4 line module.

Appendix Specification of PON interface



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