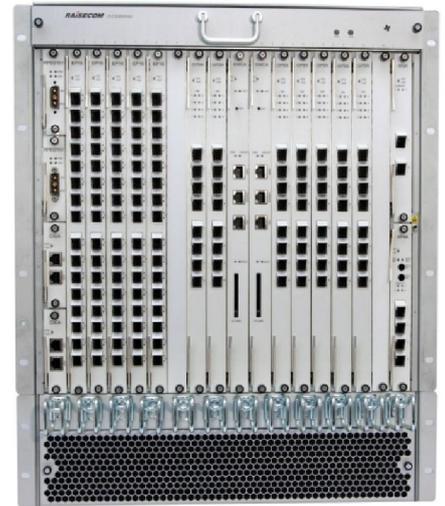


ISCOM6800 Optical Line Terminal

ISCOM6800 is next generation xPON OLT device which supports IEEE802.3ah EPON and ITU-T G.984 GPON standards. Designed for large ISP, large enterprises, SME and residential access, it offers great flexibility to deliver triple-play services to homes. It also provides rich features to satisfy operators' needs and high reliability. Modular design makes it easy to mix inserted service cards and control cards of ISCOM6800. With dedicated RAISECOM ONU for mobile operators, ISCOM6800 can meet mobile operator requirement of backhaul service. Interconnection between HQ and branches with E-Line and E-LAN solution can be well supported. With the help of ISCOM6800-XP4/2A card, operators can easily eliminate the existing uplink bottleneck and make high-speed connection. Hot-swappable redundant power supply makes the maximum network uptime. Optimized design allows the lowest initial CAPEX and TCO is going down when the more capacity is required.

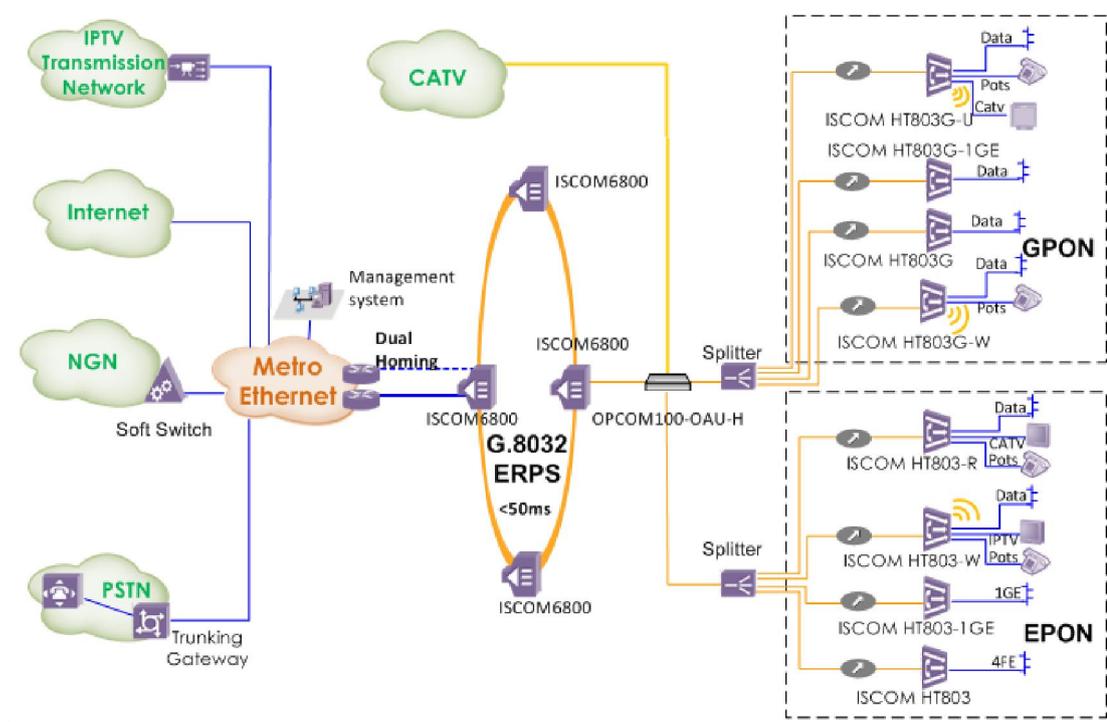


ISCOM6800

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
10GE connection	Maximum uplink 80GE connection
ONU service template	Deploy a batch of ONUs with ONU-SVR-template, 80 templates
Capacity	Maximum 14336 ONUs/ONTs per OLT
Authentication	Support five types of ONU authentication mode: None, MAC, SN, Password, SN + Password; Support three types of ONT authentication mode: None, SN, Password
Switching fabric	2.56 Tbps
Reliability Index	System availability $\geq 99.999\%$, fault probability $\leq 1.5\%$, MTTR $\leq 2H$, MTBF $\geq 100\ 000H$
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

Typical Application



Products involved

- OLT:
 - ISCOM6800
- ONTs for GPON:
 - ISCOM HT803G-1GE
 - ISCOM HT803G
 - ISCOM HT803G-U
 - ISCOM HT803G-W
- ONUs for EPON
 - ISCOM HT803
 - ISCOM HT803-1GE
 - ISCOM HT803-W
 - ISCOM HT803-R

Features

ONU/ONT	Up to 64 ONUs/128 ONTs per PON interface; Up to 14336 ONUs/ONTs per OLT
DBA	Support three forms of DBA: FIR, BIR, PIR; 64kbps granularity Up to 512xT-CONT per PON interface; Up to 4KxGEM per PON port;
FEC	Support two-way FEC Support bi-directional traffic with FEC-coded and non-FEC-coded
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; Support Manual configuration and Standard LACP (static only); besides 1:1 Link Backup
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
STP/MSTP	Supports
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; 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; 1k MLD; 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

Upgrade the software of service cards online

Specifications

Performance	Backplane Up to Bi-directional 2.56Tbps
Switching Capacity	SMCA: bi-directional 1.28Tbps
Indicators	Power Supply (flashing); GE port: LINK/ACT; SFP port: LINK/ACT
Physical Interface	Management port: 1x console (RJ45); Monitoring port: 1x SNMP RS485 port Ethernet Interfaces: Up to 8x10GE GEPON Interfaces: Up to 224xEPON ports GPON interfaces: Up to 112xGPON ports
Power Specs	AC: 220V, 50/60Hz DC: -48V/+24V Full load: ≤250W
Dimensions	440(W)*233(D)*578.5(H)mm(no brackets), 13U with the air exhaust plenum
User Conditions	Operating temp: 0~50 °C (32~122 °F); Storage temp: -25~70 °C (-13~185 °F); Humidity: 5~90% non-condensing

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

ISCOM6800-18-A	ISCOM6800 chassis with 18 slots and integrated ventilation module.
ISCOM6800-18-AGB	Airflow slot and cable array.
ISCOM6800-CICA	Environment monitoring card



ISCOM6800-SMCA	Switching and control card, which can be inserted into slot 9 or 10. Switching fabric 1.28Tbps.
ISCOM6800-XP4A	10 GE uplink line module, which provides 4 SFP+ slots for 10GE SFP+s, can be inserted into slot 19 or 20.
ISCOM6800-XP2A	10 GE uplink line module, which provides 2 SFP+ slots for 10GE SFP+s, can be inserted into slot 19 or 20.
ISCOM6800-GE16	GE uplink line module, which provides 16 SFP slots for GE SFPs, can be inserted into slot 1-8 or slot 11-16.
ISCOM6800-EP16	PON card, which provides 16 EPON ports, can be inserted into slot 1-8 or slot 11-16.
ISCOM6800-GP8A	PON card, which provides 8 GPON ports, can be inserted into slot 1-8 or slot 11-16.
GSFP-CLBDM-R	PON SFP with digital diagnosis, which is used for ISCOM6800-GP8A.
GSFP-PX20DM-R	PON SFP with digital diagnosis, which is used for ISCOM6800-EP4A or ISCOM6800-EP2A.
RPD2151-48S48	-48v power supply card.
UXFP-192/S1	Wavelength:1310 nm; RX sensitivity: -14.4 dBm@ 10.5Gbps, -13.4 dBm@11.3Gbps; TX power: -6~-1 dBm; Distance: 10 km; Bitrate: 9.95 ~ 11.3 Gbps

Appendix Specification of PON interface

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