

SUBSCRIBER END EQUIPMENT



Saturn SOLT33-08P

8 Ports OLT

Optical Line Terminal

Product Description

The Internationally certified Saturn OLT meeting the requirements of ITU-T G.984/G.988 with carrier-class reliability and complete set of security functions. this product is designed with focus on quality performance and features. Based on advanced technology and supporting powerful Ethernet services and QoS features, the Saturn OLT runs highly flexible software in order to satisfy custom operator requirements

Product Features

- » Compact 1RU 19inch design
- » 8 GPON ports
- » 4 GE Optical/Electrical uplink ports
- » 2 x 10GE ports SFP+
- » Support B+ and C+ SFP
- » ONT Broadcast and loop protection
- » Hot Dual power supply

High-performance software-driven platform

The Saturn SOLT33-08P OLT is an enhanced OLT that is easy to install and maintain. The compact 1U OLT provides 8 downstream GPON ports, 4 uplink GE optical port and 4 GE electrical ports with an expansion slot supporting an additional 2 x 10GE SFP+ ports. The splitting ratio of up to 1:128. Supports different configurations of Genexis ONTs in order to minimize operator investment

PRODUCT FEATURES AND SPECIFICATIONS

Saturn SOLT33-08P

General Specifications

- » Dimensions (L x W x D) 445x277x44 mm
- » Weight ≤ 2.8 kg
- » Power supply AC 90 - 264 V, 47/63 Hz
DC -36 - -72 V
- » Power consumption (full config)
≤ 50 W
- » Switching Capacity 102.5 Gbps
- » Forward Capacity (IPv4/IPv6) 152.5 Mbps

Environmental Requirements

- » Operating temperature -10 - 65 °C
- » Storage temperature -40 - 70 °C
- » Relative humidity
10% - 90%, non-condensing

Ports

- » 8 GPON ports
- » 4 GE Optical/Electrical uplink ports
- » 2 x 10G uplink

GPON

- » ITU -T G.984.x compliant
- » Supports up to 128 x ONTs
- » Max. transmission distance 20km
- » Uplink and downlink triple churning encrypted function with 128Bits
- » ONU Terminal legitimacy certification report illegal ONU registration
- » DBA algorithm, the particle is 1Kbit/s
- » Standard OMCI management function
- » ONU batch software upgrade, fixed time upgrade, real time upgrade
- » PON port optical power detection

Service Features - Layer 3

IPv4

- » ARP Proxy
- » DHCP Relay
- » DHCP Server
- » Static route

IPv6

- » ICMPv6
- » ICMPv6 Redirection
- » DHCPv6

Layer 2

MAC

- » MAC Black Hole
- » Port MAC Limit
- » 64K MAC (packet exchange chip cache 2MB, external cache 720 MB)

VLAN

- » 4K VLAN entries
- » Port/MAC/IP subnet-based VLAN
- » QinQ and Flexible QinQ (Stack VLAN)
- » VLAN swap and remark

Spanning Tree Protocol (STP)

- » IEEE 802.1D Spanning Tree Protocol
- » IEEE 802.1w Rapid STP
- » IEEE 802.1s Multiple STP
- » ONU remote loop detect alarm

Ports

- » Bi-directional bandwidth control
- » Static link aggregation
- » LACP
- » Port mirroring

Security

User Security

- » Anti-ARP-spoofing
- » Anti-ARP-flooding
- » IP Source Guard
- » IEEE 802.1x & AAA/Radius authentication
- » IP Source Guard create IP, VLAN, MAC
- » Port Isolation
- » MAC address binding to the port and MAC address Filter

Device Security

- » Anti-DOS attack (such as ARP, Synflood, Smurf, ICMP attack), ARP
- » Detection, worm and Msblaster worm attack
- » SSHv2 Secure Shell
- » SNMP v3 encrypted management
- » Security IP login through Telnet

Network Security

- » User based MAC & ARP traffic examination
- » Restrict ARP traffic of each user and force-out user with abnormal ARP traffic
- » Dynamic ARP table-based binding
- » IP, VLAN, MAC and Port binding

Reliability

Loop Protection

- » ERPP (recover-time <50ms)
- » Loopback-detection

Link Protection

- » RSTP/MSTP (recover-time <1s)
- » LACP (recover-time <10ms)

Device Protection

- » 1+1 power hot backup

Maintenance

Network Maintenance

- » GPON OMCI
- » Ping and Traceroute
- » Port real-time, utilization and transmit/receive statistic based on Telnet

Device Management

- » CLI, Console port, Telnet
- » SNMPv1/v2/v3
- » RMON (Remote Monitoring)1,2,3,9 groups MIB
- » NTP
- » Saturn NMS

Configuration Options

Model	Description	Configuration
SOLT33-08P	8 PORT OLT	8 x GPON ports, 4 x GE optical/Electrical and 2 x 10G Uplink
SAC0	Additional Power supply	Power supply unit
SEMS15	Saturn EMS	EMS Software and basic licence



GX GROUP

“ ONLY VENDOR HAVING EMS WITH INTEGRATED TR-069, FOLLOWING INTERNATIONAL STANDARD FOR ONT MANAGEMENT ”

MOST ADVANCED OLT FAN SYSTEM

The high-end hardware used in all Saturn OLT requires appropriate cooling, under any conditions.

Our innovative design have made it possible to absorbs cool air from the left of the chassis and exhaust the hot air at the right side, without collecting dust. Independent fans and heatsinks are used to cool the CPU and GPU, giving a more efficient, dedicated cooling without filter.



Air Flow

Fan blade design inspired by helicopters. They move the air less distance but pack more force into the space in front of the fan. By forcing the air in 2 direction, the Saturn OLT managed to keep the dust out from the FAN and 1RU housing

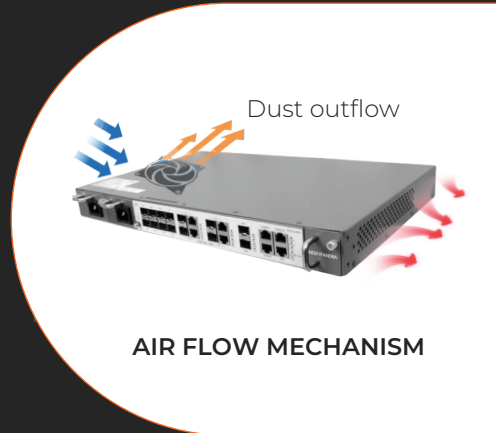


Cooling Balance

Airflow balance solutions are not commonly deployed because of two main factors. The first factor is a lack of knowledge. The 2nd factor is the off-the-shelf design use in all telecom equipments

ABOUT THE COMPANY

GX GROUP is market leader in in-house designed GPON equipments, and been in operation since 2002, with focus on market specific products, based on the local conditions and requirements



AIR FLOW MECHANISM