

AOLT-4200

Compact 8-port GPON Optical Line Terminal

Feature Summary

- ◆ Stable GPON
 - ◇ Complies with ITU-T G.984.1-4 G-PON standard
 - ◇ 2.5Gbps downstream and 1.25Gbps upstream
 - ◇ DBA (Dynamic Bandwidth Allocation) and QoS based on 4,096 of T-CONT
 - ◇ 128 bit AES Encryption and FEC
- ◆ High Performance Layer 2 Switching
 - ◇ Full throughput for all ports (non-blocking)
 - ◇ High capacity packet switching (16K MAC table)
 - ◇ Powerful Layer 1 ~ 4 filtering and QoS
 - ◇ IGMP Snooping/Proxy for multicasting network
- ◆ Various Interfaces
 - ◇ Downlink Interface (SFP): 8 PONs
 - ◇ Uplink interface: 4 x 1GbE (SFP) and 2 x 10GbE (XFP)
- ◆ Excellent Operation and Management
 - ◇ Management via SNMP/Telnet & Console
- ◆ Security
 - ◇ Layer 1~4 Packet filtering (ACL)
 - ◇ DHCP Packet filtering
 - ◇ MAC Restriction per port
 - ◇ Broadcast / Multicast / DLF packet limit
 - ◇ Port flood guard for abnormal traffic
 - ◇ Loop detection and blocking
- ◆ Power redundancy (DC only)
- ◆ 19" standard rack mountable



AOLT-4200 with AC Input Power



AOLT-4200 with DC Input Power

The latest advancement from Alphion Corporation is the 1RU OLT. This innovative OLT unit gives unmatched performance through 4 x 1GbE (SFP) and 2 x 10GbE (XFP) uplink ports in a space and power conscious design. The AOLT-4200 mountable on the standard 19 inch rack feature compact design requiring only 1 Rack Unit of space saves valuable rack space. One of the industry's highest port density OLTs, easy installation and seamless configuration capability are just some of the innovations of this unit.

Servicing many markets such as Telecom, CATV, Enterprise providers Alphion saw a need for a more versatile OLT unit that would benefit customers not only through more efficient power utilization but wouldn't diminish in performance as well. The built-in high performance switch of the AOLT-4200 supports Ethernet base Layer 2 switching function, and provides up to 512 GPON subscribers.

The advanced design of the AOLT-4200 offers the same functionality of the AOLT-4000 chassis family, supporting Layer 2 functions as STP (Spanning Tree Protocol), Link aggregation, port-based VLAN, 802.1Q, mirroring and DHCP relay and IGMP snooping/proxy for efficient transmission of multicast traffic.

This original design also supports the IEEE1588v2 PTP and distributes ToD over GPON framing which is suitable for 2G/3G and LTE mobile backhaul applications.

SPECIFICATIONS



GPON

ITU-T G.984.1,2,3,4 compliant
Downstream: 2.5Gbps, 1490nm, Class B+ and C+
Upstream: 1.25Gbps, 1310nm, Class B+ and C+
Service Distance: up to 20km
Split ratio: up to 64

Switching

Layer 2 Switching (Store and Forward)
Switching Capacity: 160Gbps Ethernet Switching
Switching Performance:
Full throughput for all ports (Non-blocking)
16 K MAC
4095 VLANs
Multicasting: IGMP snooping, IGMP proxy
STP, PVSTP, RSTP
Link aggregation, LACP
DHCP relay with Option 82
Security
Packet filtering (Access control list), Port flood guard
MAC address limitation per port

QoS

8 priorities queues per port
802.1p, ToS, DSCP marking/remarking
Scheduling: SPQ, WRR, WFQ
Congestion Control
HOL Blocking prevention
Back pressure, 802.3x

Management

Alphion EMS, CLI, Telnet, RMON, SNMP v1/v2
Remote S/W upgrade via TFTP and FTP
Alarm (Critical, Major, Minor)
Built-in Real-time clock, NTP, built-in thermometer

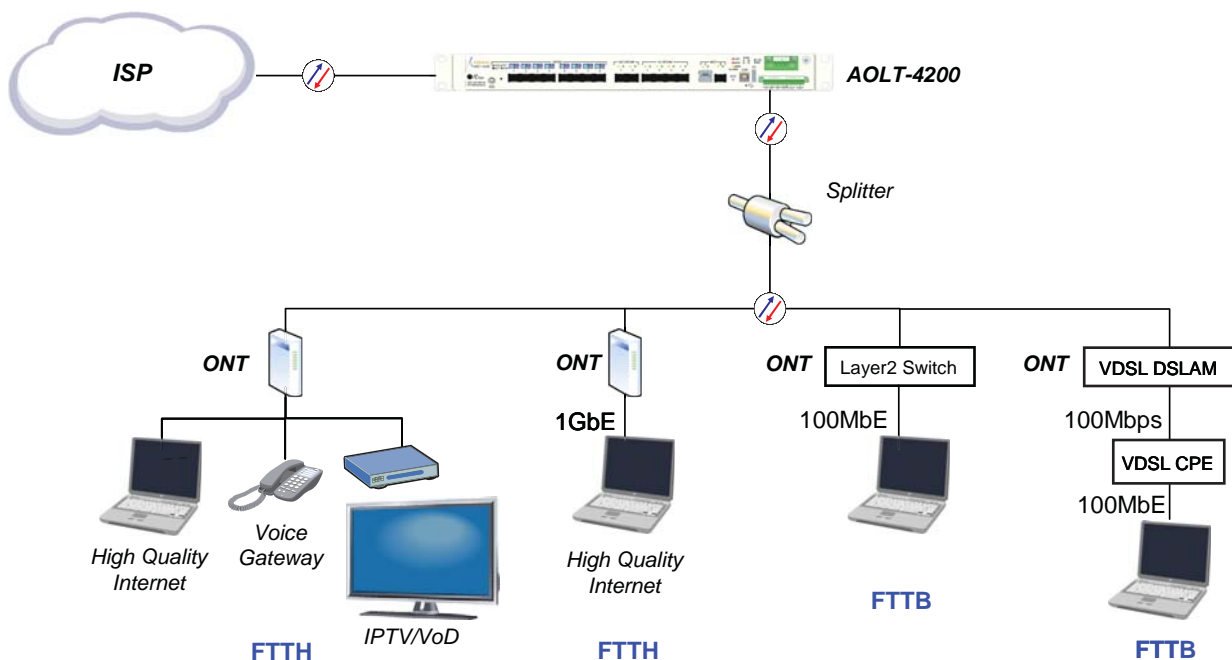
System

PON ports
8 PONs (SFP ordered separately)
Uplink Interface:
4 ports of 1000Base-X (SFP ordered separately)
2 ports of 10GbE (XFP ordered separately)
Dimensions:
430(w) x 290(d) x 44(h) mm
19 inch standard rack mountable (1RU)
Net Weight: max. 5.45kg
Front Access Structure
Power redundancy, fan, thermometer

Operation

Input Power: redundant 48VDC or
non-redundant 90-270VAC 50/60Hz
Power consumption: max. 85W
Operation Temp: 0 °C ~ 40 °C
Noise: max. 45dBA

Service Deployment of GPON Network



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