

# AONT-1308

## GPON Optical Network Terminal (2GE+2POTS) Alphion Part Number 240-0100133

### Feature Summary

- ◆ Support for a wide range of revenue generating voice features
- ◆ Wire speed 1000Mbps data transfer
- ◆ QoS handling including four traffic classes for triple-play service support
- ◆ Extensive Ethernet bridging plus VLAN tagging, switching and filtering capabilities for secure traffic management across services and end users
- ◆ Power management for preservation of essential services during AC power outage
- ◆ Indoor or Outdoor wall mountable for easy installation
- ◆ Cost effective deployment of revenue generating services

### Highlights

- ◆ Voice, data, IPTV, and video services supported over a single GPON passive optical link
- ◆ VoIP Softswitch or CLASS 5 based high quality voice service through two POTS lines
- ◆ High speed internet or VoIP access through two 10/100/1000 Base-T Ethernet interface

### Description

Alphion's standards-based ONT family delivers cost effective revenue generating features for today's competitive access market. With the broadest array of proven interoperability, Alphion's ONT family provides flexibility for a variety of network applications. The AONT-1308 residential ONT delivers high quality VoIP voice service, Ethernet data service for high-speed internet access and IPTV broadcast video plus video on demand services.



# SPECIFICATIONS



## Network Interfaces:

### Optical

Data rate:	2.5 Gbps downstream 1.244 Gbps upstream
Optical wavelengths:	1490 +/-10nm receive 1310 +/-20nm transmit
Launch power:	0.5 to +5 dBm
Receiver Sensitivity:	-27 dBm
Input power overload:	-8 dBm
Received optical power monitoring	
SC/PC or SC/APC connector	

### Subscriber Interfaces:

#### POTS

Two interfaces equipped with RJ-11 connectors or IDC jacks  
5 REN per line  
Loop start/Ground start  
Balanced and unbalanced ringing  
Country specific coefficients  
DTMF dialing  
Metallic loop testing

#### Ethernet

Two RJ-45 jacks  
10/100/1000 Base-T  
Meets IEEE 802.1 specifications  
MDI/MDIX auto-sensing  
Auto-MDI/MDIX and auto speed supported

### Services and Features:

#### GPON

Serial number discovery and registration ID provisioning  
Full ITU-T G.984 compliance  
Advanced Encryption Standard (AES)  
Dynamic Bandwidth Allocation (DBA)  
8 T-CONTS

#### OAM

ITU-T G.984.4 based management of all services  
Remote firmware upgrade including automatic rollback  
TR-069 provisioning for VoIP  
SIP configuration from TConfig server

#### Ethernet L2

Ethernet bridging and switching per 802.1D  
QoS with support with 802.1p and TOS/DSCP mapping  
802.1Q including VLAN translation, filtering, tagging, stacking (QinQ)  
Up to 64 VLANs  
Session hijacking prevention  
Automatic MAC address learning and aging  
Up to 512 MAC address entries  
MAC address limiting  
Broadcast storm control

### Voice

SIP (RFC 3261)  
H.248  
MGCP (RFC 3435)  
SDP (RFC 2327)  
RTP/RTCP (RFC 3550/3605)  
RFC 2833  
DTMF encoding by RELAY or IN-BAND method  
CLASS service support (Caller ID, Call Waiting, Call Forwarding, Call Transfer etc.)  
G.711 ( $\mu$  & a law)  
G.726 voice codec  
T.30 FAX, modem and TTY devices  
DHCP Client or static IP configuration  
Echo Cancellation  
Voice Activity Detection and Comfort Noise Generation  
Proven interoperability with major soft switch and voice gateway vendors

### LEDs

- Power
- ManagementData
- Battery
- Network
- Fail
- POTS

### Dimensions and Weight

Size:	13 x 11.25 x 4.3 inches 233 x 286 x 110 mm
Weight:	5.5 lbs 2.2 kg

### Environmental

ONT:	-40°C to +46°C ambient + solar load -40°F to +114.8°F
Outdoor enclosure:	-40°C to +65°C -40°F to +149°F
Humidity:	5% to 90%
Outdoor enclosure:	Sold separately

### Power

Power consumption:	12 - 16 Watts
Power input:	12 to 14 Vdc
Input connector:	Phoenix type plug
Dying gasp support	
Local power via UPS with battery backup	

### Regulatory Compliance

(Designed to meet the following Compliance requirements)  
Safety: UL/CSA 60950, IEC 60950, ETSI  
FDA – FCC 47 CFR Part 15, Class B and FDR 21 CFR 1040.10 and 1040.11 Class 1  
EMC: FCC PART 15, SUBPART B, CLASS B  
EN 55022, EN 55024, EN 300 386, CLASS B  
CE: Compliant  
RoHS: Compliant  
WEEE: Compliant

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