

AONT-1530

GPON ONT 4 GE Ports (SFU/HGU)



Feature Summary

- ✦ Single Family unit
- ✦ ITU-T G.984.1-5 standard compliant
- ✦ ITU-T G 988 standard compliant
- ✦ Indoor wall or table mount
- ✦ Four 10/100/1000 Base-T Ethernet RJ-45 Ports
- ✦ 10/100/1000Mbps auto-negotiation
- ✦ Half-duplex & full-duplex operation
- ✦ MDI/MDIX auto detection
- ✦ 802.1p tag based QOS both ingress/egress on each port
- ✦ 802.1ad Double tagging support
- ✦ 802.1d, 802.1q based bridging
- ✦ IGMP snooping and filtering with 256 Multicast groups
- ✦ Support OMCI, CLI
- ✦ Holds a working image & alternative image for image rollback
- ✦ Hybrid Mode Support
- ✦ DHCP Option 60/43/70
- ✦ DHCP Client/Server
- ✦ PPPoE Client
- ✦ NAT
- ✦ DNS Relay

Applications

The AONT-1530 has been optimized for residential homes to provide high speed internet services.

Advanced GPON technology

The AONT-1530 is fully FSAN (ITU-T G.984/G988) compliant with a 1.244 Gbps upstream and 2.488 Gbps downstream, Class B+ GPON system.

Quality of Service

The AONT-1530 supports extensive QoS features, including 802.3x flow control, DSCP to 802.1p mapping, and downstream traffic scheduling for premium or time sensitive content. Intelligent and robust buffer and queue management for Ethernet traffic, with individually prioritized queues, ensures that tiered service offerings based on different bit-rates and QoS can be supported.

Security

The AONT-1501 comes with the latest security features, including MAC address black list and white list, selectable pass/block BPDU, and MAC address limiting.

Small form-factor

A space conscious package for simplified wall or table mounting.

Flexible Management

The AONT-1530 is managed from an Alphion OLT over the GPON's OMCI channel. The AOLT in turn is managed with either Alphion's Element Management System (AEMS) that provides configuration, profile based provisioning, event and fault management and performance monitoring for the AONT, or with a 3rd party EMS using SNMP or a legacy NMS.

SPECIFICATIONS

GPON uplink interface

Interface	1X SC/APC Connector, Single mode fiber Activation with automatically discovered SN and password
Standard	Compliant with ITU G.984.2 Class B+ Compliant with ITU G.984.5
Transmitter	Support 1.244Gbps upstream bandwidth DFB transmitter working in 1310nm, Mean launch power in 0.5~5dBm range Turn on/off time at burst mode < 12.8ns
Receiver	Support 2.488.Gbps downstream bandwidth APD receiver working in 1490nm, with -8 ~28dBm working range solution to 1310nm > 47dB Isolation to (1440~1450nm), (1530~1540nm) > 25dB Isolation to (1400~1440nm), (1540~1625nm) > 40dB
TC Layer	Support type 1~5 TCONT defined in G.984.3 Support flexible mapping between TCONT & GEMPORT. Supports FEC in the upstream and downstream direction
GEM port	up to 256
T-CONT	up to 32

Ethernet interface

GE port	Four RJ-45 connectors
Standard	compliant with IEEE 802.3, 802.3u, 801.3ab Compliant with IEEE 802.3az, Green Ethernet
Link	10/100/1000Base-T with full duplex and half duplex auto-negotiation and MDI/MDIX auto-sensing

Power

AC adapter	Input: 220VAC, 50Hz; Output: 12VDC, 1.5A
Control	Power ON/OFF switch
Connector	A standard barrel connector

Layer 2 Bridging features

MAC	support the Ethernet data frame filtering based on port, SA/DA Support 2000byte MTU, Compliant with IEEE 802.3as
VLAN	Supports 256 MAC addresses Support 802.1p, 802.1d, 802.1q based QoS Support forwarding traffic class into GEMPORT & TCONT Support ingress/egress 802.1p tag based QoS on each port Support double tagging, compliant with IEEE 802.1ad

Physical

Temperature	0 to 40 °C
Humidity	10 to 90% non-condensing
Dimension	41.5mm (H) x 208.3mm (W) x 131.0mm (D))
Weight	0.4kg
Mounting	Wall or Desktop
LEDs	Power, LOS, GPON, LAN1-4

Management

Local	Web based GUI
Remote	ITU-T G.988 OMCI, TR-069, Telnet
Image	Supports firmware upgrade via remote server Hold a working image & a alternative image for image rollback
Restore Default	1. Press hidden button for 10 secs 2. Use GUI Web, CLI, Telnet method

Regulatory Compliance

Certification	CE compliant
EMC/EMI	EN55022, Class B, EN 300 386
Mechanical	IP20
Immunity	radiant RF: EN/IEC61000-4-1-5
Fire Safety	UL 94-VI.V0 Optional
Electrical	IEC60950-1
ESD	EN/IEC61000-4-1-5
Hazardous	RoHS6, WEEE, CoC V4, Energy efficiency level V