

AONT-1530



GPON Gateway ONT (4GE) + PoE

Feature Summary

- Single Family unit
- 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
- Support IEEE 802.3at PSE for each Ethernet port
- 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
- Supports OMCI, CLI configurations
- Supports firmware upgrade via remote server
- Supports dual software image. Holds a working image & alternative image for image rollback
- Powered through Adapter with the Following specification
Input: 100-240VAC/1.5A 50/60Hz
Output: 54.0V/1.5A

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) 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.

Gateway

The AONT-1530 contains both wire-speed L2 switch and L3 routing gateway with port forwarding, NAT and NAPT address translation, built-in PPPoE support for HSI, and an integrated stateful packet inspection firewall with a configurable access control list (ACL) and application-level gateway (ALG). Support for VPN (L2TP, PPTP and IPSec) pass through is also provided. Included as part of the gateway function are DHCP client, DHCP server, and DNS server for IPv4 and IPv6.

Security

The AONT-1530 supports AES-128 bit decryption with key generation and switching in the downstream.

Flexible Management

The AONT-1530 is managed from the AOLT-4000 and AOLT-4200 OLT via OMCI. The AOLT in turn is managed with either Alphion 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 NMS via northbound interface.

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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 ClassB+ 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 to 28dBm working range Isolation 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 T-CONT	up to 256 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: 100 - 240VAC, 50Hz/60Hz; Output: 54VDC, 1.5A
Control	Power ON/OFF switch
Connector	A standard barrel connector
PSE	Support IEEE 802.3at PSE standards Support CISCO PD detection Support Max 30W output for each port

Management

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

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

Gateway features for IPv4 and IPv6

WAN	PPPoE, DHCP client or static IP, NAT/NAPT, port forwarding, port triggering
LAN	DHCP server and relay agent, DHCP option 60, DNS relay
Routing	RIP v1/v2 and static IP routing

IPv6 support

Mode	Dual stack lite, 6rd
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Firewall

Type	Stateful packet inspection
Filtering	DoS attack prevention, IP source/destination filtering, TCP/UDP port source/destination filtering, MAC source filtering
ALGs	FTP, SIP, H.323, RSTP
VPN	PPTP, L2TP, IPSec pass-through
Access control	DMZ, Parental Controls

Physical

Temperature	0 to 50 °C
Humidity	10 to 95% non-condensing
Dimension	209mm(W) x 130mm(D) x 40mm(H)
Weight	0.4kg
Mounting	Wall or Desktop
LEDs	Power, LOS, GPON, LAN1-4

Regulatory Compliance

Certification	CE compliant
EMC	EN55022, CISPR-22 Class B
Safety	EN60950/UL60950
Laser safety	IEC-60825-1 Class 1 laser safety per G.664
Transient	EN/IEC61000-4-4(2001) level 2
Immunity	Radiated RF: EN/IEC61000-4-3(2002) level 2 Conducted RF: EN/IEC61000-4-6(2001) level 2 EN/IEC61000-4-5(2001) 0.5 KV (line) and 1.5 KV (earth)
Surge	EN/IEC61000-4-2(2001) contact level 2, air discharge level 3
ESD	EN/IEC61000-4-2(2001) contact level 2, air discharge level 3
Hazardous	RoHS6, WEEE

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