

The AD1G-1644 is a high-capacity 1U GPON OLT, designed to address the mass deployment of fiber optic connectivity. It is designed to address the markets' today's needs to cater to Residential, Business and Enterprise users.

It can integrate with various ONUs and supports good interoperability. The AD1G-1644 system has good stability and high reliability. It supports multiple management modes such as CLI, WEB & SNMP.



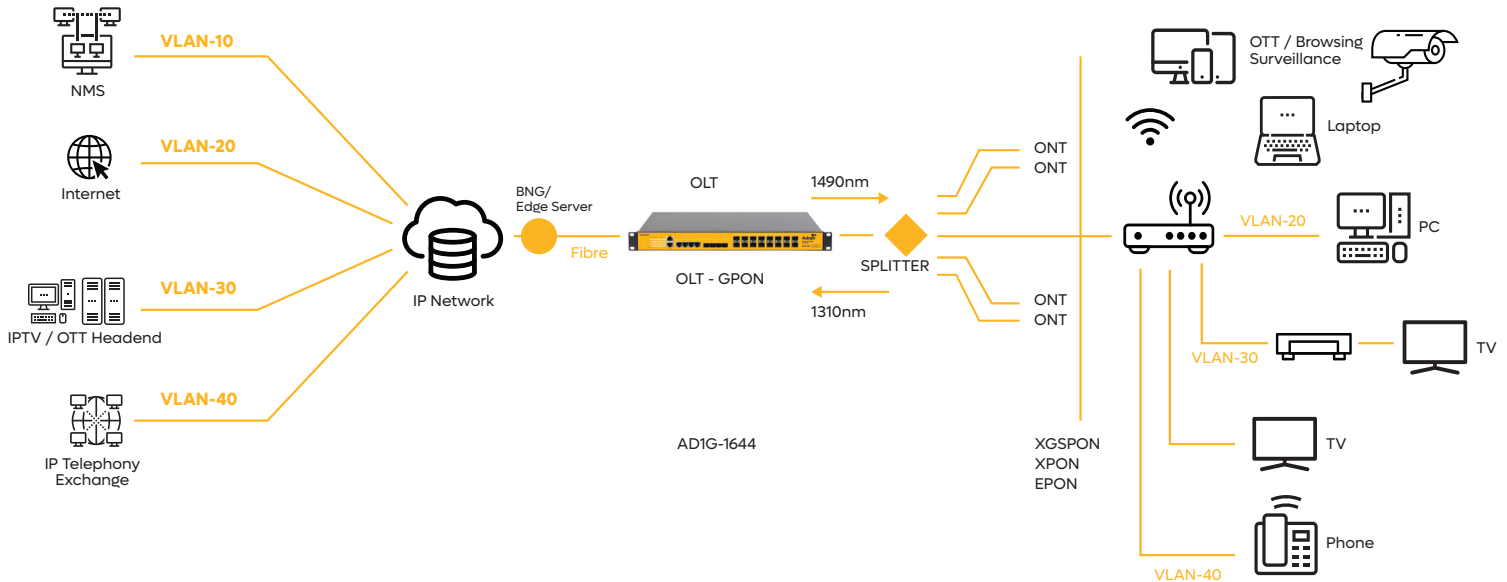
The graphical management interface is clear, friendly, and easy to use. The AD1G-1644 provides 16 downstream GPON ports, 4*1000Base-T up-link ports and 4*10G optical SFP+ up-link ports. The SFP+ port has an expansion function, can support 1GE SFP or 10GE SFP+.

The AD1G-1644 adopts the industrial advanced technology, with powerful Ethernet services and QoS feature, supporting SLA and DBA. The split ratio up to 1:128, supports different types of ONU in different networks, minimizing operators' investments. The 1U height makes it easy to install and maintain. It is an excellent choice for operators to quickly deploy FTTH networks using GPON technology.

CHARACTERISTICS

- Applicable to county and town level fiber optic network access and monitoring transmission, meets FTTH requirements to provide complete access to IP telephony, Broadband data, IPTV, etc.
- System Structure: Provide 16 downstream GPON ports, 4*1000Base-T up-link ports and 4*10GE optical SFP+ up-link ports.
- 2048 MAC address table.
- The SFP+ port with an expansion function, which can adapt to 1GE SFP or 10GE SFP+.
- System Capacity: 1:128 split ratio, full configuration supports up to 2048 GPON terminals.
- Up-link Interface: Flexible design supports multiple types network interfaces, optical or electrical interfaces optional based on network conditions.
- Supports dual power supply. 1U device takes small space, low power consumption, which reduce the total cost.

ADOPT OLT



SPECIFICATION

Item	AD1G-1644
Switching capacity	168Gbps
Mac Address	64K
Ports	16*PON 4*10G SFP+, 4*GE
Power redundancy	Dual power supply. Can be double AC, double DC or AC+DC
Power supply	AC: Input 85~264V, 47~63Hz DC: Input 36V~75V;
Maximum Power	80W
Outline dimensions (mm) (W*D*H)	440mmx310mmx44mm
Weight	<5kg
Environmental requirements	Working temperature: -10 C~50 C Storage temperature: -40 C~85 C Relative humidity: 5%~95%, no condensing

PRODUCT FEATURES

SECURITY FEATURES

Network Security

User-based MAC and ARP traffic examination, Restrict ARP traffic of each user and force-out user with abnormal ARP traffic, Dynamic ARP table-based binding, Supports IP+VLAN+MAC+Port binding. L2 to L7 ACL flow filtration mechanism on the 80 bytes of the head of user-defined packet, Port-based broadcast/multicast suppression and auto-shutdown risk port, URPF to prevent IP address counterfeit and attack, DHCP Option 82 and PPPoE+ upload user's physical location, Plaintext authentication of OSPF, RIPv2 and MD5 cryptograph authentication

IP ROUTING

IPv4

ARP Proxy
DHCP Relay
DHCP Server
Static route

IPv6

ICMPv6
ICMPv6 redirection
DHCPv6
ACLv6
Configured Tunnel
6to4 tunnel
IPv6 and IPv4 Tunnels

SERVICE FEATURES

ACL

Standard and extended ACL, Time Range ACL, Packet filter providing filtering based on source/destination MAC address, source/destination IP address, port, protocol, VLAN, VLAN range, MAC address range, or invalid frame. System supports concurrent identification at most 50 service traffic, Support packet filtration of L2~L7 even deep to 80 bytes of IP packet head

QoS

Rate-limit to packet sending/receiving speed of port or self-defined flow and provide general flow monitor and two-speed tri-color monitor of self-defined flow, Priority remark to port or self-defined flow and provide 802.IP, DSCP priority and Remark, CAR (Committed Access Rate), Traffic Shaping and flow statistics, Packet mirror and redirection of interface and self- defined flow, Super queue scheduler based on port and self-defined flow. Each port/ flow supports 1 priority queues and scheduler of SP, WRR and SP+WRR, Congestion avoid mechanism including Tail-Drop and WRED

PRODUCT FEATURES

PON FEATURES	GPON	Satisfy ITU -T standard High splitter rate, each PON port supports 128*ONU Maximum transmission distance of 20KM Support uplink FEC, downlink FEC(Forward Error Correction) ONU identifier authentication: SN/SN+PASSWD/LOID Bandwidth allocation mechanism 5 types of T-CONT bandwidth Static Bandwidth Allocation Dynamic Bandwidth Allocation
L2 FEATURES	MAC	MAC Black Hole Port MAC Limit
	VLAN	4K VLAN entries Port-based/MAC-based/IP subnet-based VLAN Port-based QinQ and Selective QinQ (StackVLAN) VLAN Swap and VLAN Remark and VLAN Translate Based on ONU service flow VLAN add, delete, replace
	Protocol	STP, RSTP, MSTP
	Port	Bi-directional bandwidth control Static link aggregation and LACP(Link Aggregation Control Protocol) Port mirroring and traffic mirroring
L3 FEATURES	Protocol	OSPF, IS-IS, BGP
SECURITY FEATURES	User Security	Anti-ARP-spoofing Anti-ARP-flooding IP Source Guard create IP+VLAN+MAC+Port binding Port Isolation MAC address binds to port and port MAC address filtration IEEE 802.1x and AAA/Radius authentication DHCP anti-attack flood attack automatic suppression ONU isolation control
	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 Hierarchical management & password protection of users

PRODUCT FEATURES

SERVICE FEATURES	Multicast	IGMPv1/v2/v3 IGMPv1/v2/v3 Snooping IGMP Filter MVR and cross VLAN multicast copy IGMP Fast leave IGMP Proxy MLDv2/MLDv2 Snooping
RELIABILITY	Loop Protection	EAPS and GERP (recover-time <50ms) Loop back-detection
	Link Protection	FlexLink (recover-time <50ms) RSTP/MSTP (recover-time <1s) LACP (recover-time <10ms)
	Device Protection	Double fault-tolerant backup of host program and configuration files 1+1 power hot backup
MAINTENANCE	Network Maintenance	Telnet-based statistics RFC3176 Flow LLDP 802.3ah Ethernet OAM RFC 3164 BSD syslog Protocol Ping and Traceroute
	Device Management	Web management Console/Telnet Command-line interface (CLI) Upgrade via FTP System configuration with SNMPv1/v2/v3 RMON (Remote Monitoring) Support SNTP network time protocol

At Adopt, we are helping create the worlds most advanced networks through AI, wired & wireless networks, connected devices, Cloud & Data Analytics.

Our people and solutions are at the cutting edge of innovation, helping solve todays problems and anticipating future needs.

Adopt is created through a synergy between Altius and RAH infotech - bringing together a wealth of experience in their individual domains.

ACF is one of the fastest growing system integrator for Telecom, Broadband and Cable & Broadcast Industry.

RAH Infotech is one of India's leading value added distributor and solutions provider in the Network and Security domain.

Our combined expertise coupled with a young dynamic team allows us to create continuous innovation that is designed, created and manufactured in India for a global marketplace.

Adopt solutions increase user experience, optimise operations and increase profitability by leveraging existing infrastructure and connecting to AI based Cloud Controller over EDGE. Our solutions ensure that you are always ahead of the curve