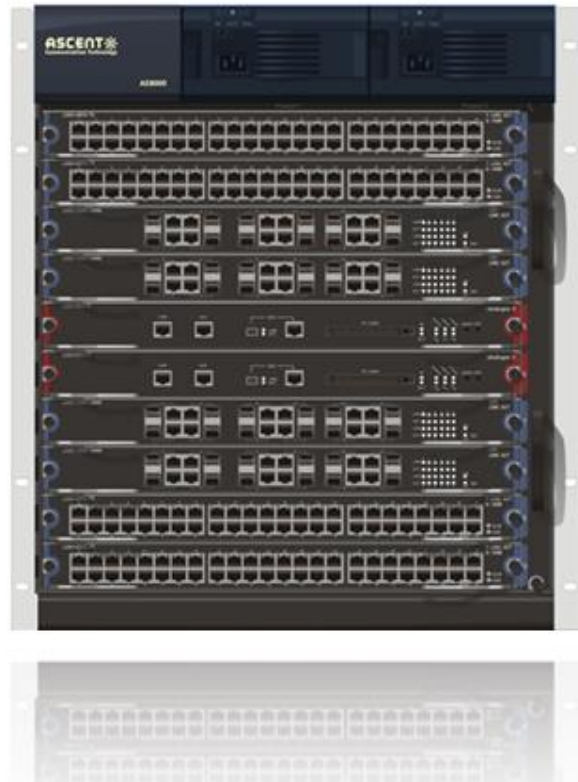


## High Density Core Switch P2P Solution

---

### AE8000 Series

- L2/L3/L4 Aggregation Switch/Router
- High Density
- Supports up to 336 ports at 1Gb/s
- IPTV and Video Overlay Supported
- High Performance
- 2.6 Tb/s Backplane Capacity
- Congestion-Free



ACT AE8000 P2P CORE Switch Platform is a series of high performance L2/L3/L4 switches, which provide Network Operators and Services Providers with the powerful aggregation layer for the Gigabit Ethernet P2P services in Fiber to The Home/Business (FTTH & FTTB) networks.

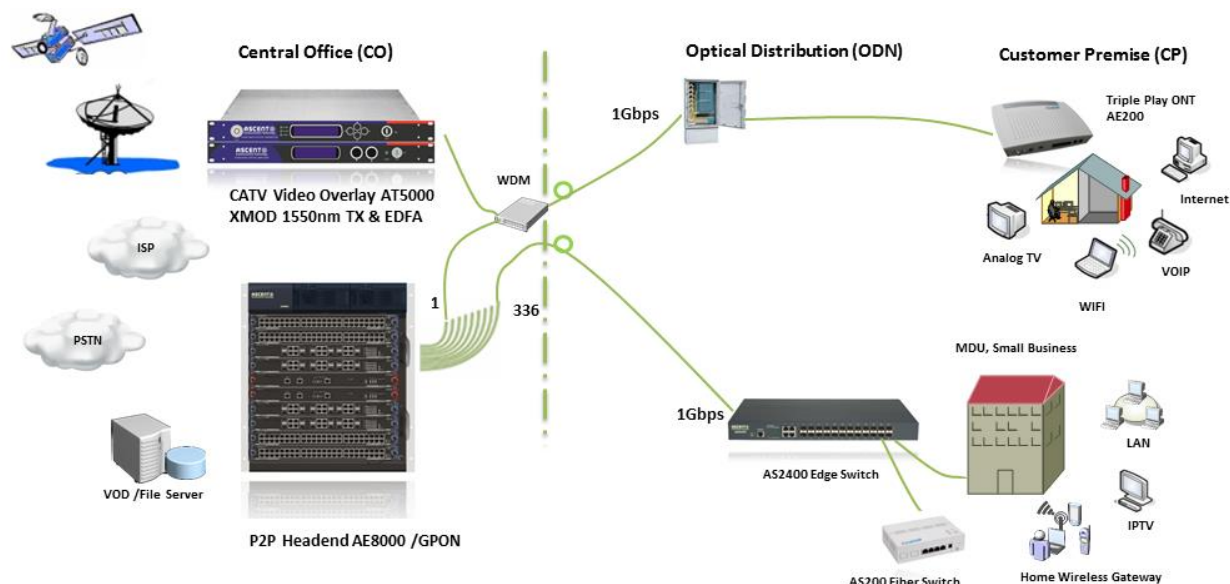
AE8000 series includes three base models: AE8006, AE8009 and AE8012. With the modular design, these series of platforms fit into the standard 19 inch rack with 6, 9, 12 RU height respectively. The platform provides high density ports with flexible configuration options through user friendly interface to allow operators to expand the existing networks and services quickly.

AE8000 series offers robust switching and routing capabilities, and seamless cooperate with ACT routing and switching products. Combined with ACT Video Overlay package, the AE8000 can provide perfect end-to-end FTTX solution in offering advanced Video, Voice, and Data services.

## Key Features

- High density Gigabit Active Ethernet FTTH platform supports up to 336 subscribers per chassis
- High performance L2/L3/L4 switching with IPv6 supported
- Up to 4 x 10 Gbps uplinks with XFP ports with link aggregation
- Passive backplane supporting 2.6 Tbps switching fabric
- High-level security supporting extended ACL, DAP, RADIUS, and Intelligent ARP defence
- Supports Active Ethernet technology with Fast Ethernet and Gigabit Ethernet subscriber lines
- Strict QoS with 802.1p, Diffserv, and L2-L4 flow classification
- Wire-speed switching and aggregation with up to 384 Gbps capacity
- Dual hot-swappable redundant controller cards
- Dual hot-swappable power supplies for redundancy
- Shelf management for monitoring and control via network. Both CLI and SNMP access
- Advanced routing and switching features
- RADIUS-based broadband management and customer SLA control
- Low Power consumption to save maintenance and services cost

## Application Diagram



## Specifications

### AE8012 Gigabit Active Ethernet P2P Platform - 19" 12RU

Controller Card Slots	2 controller card slots
Line Card Slots	8 line card slots
Backplane	Passive backplane with 2.6 Tbps throughput capacity
Shelf Manager	SNMP (Simple Network Management Protocol), CLI (Command Line Interface)
Operating Temperature	0 to 50 °C optimal performance 15 to 35 °C
Relative Humidity	10% to 90% no condensation
Dimensions (W x D x H)	482×548×533 mm
Ship Size (W x D x H)	670 x 600 x 600 mm
Weight	Empty chassis: 30 kg ; With all card slots occupied: 64 kg
Ship Weight	82 kg

### AE8009 Gigabit Active Ethernet P2P Platform - 19" 9RU

Controller card slots	2 controller card slots
Line card slots	4 line card slots

### AE8006 Gigabit Active Ethernet P2P Platform - 19" 6RU

Controller card slots	1 controller card slot
Line card slots	2 line card slots

	AE8006	AE8009	AE8012
Expanded slot quantity	3	6	10
Service slot quantity	2	4	8
Backplane bandwidth	768Gbps	1.5Tbps	2.6Tbps
Exchange capacity	384G	768G	1.5T
Packet's forwarding rate	143Mpps	286Mpps	572Mpps
Maximum # of 10G ports	8	16	32
Maximum # of 1G ports	96	192	384
Maximum # of 100M ports	96	192	384
Physical size (WxDxH)	482×548×266mm	482×548×399mm	482×548×533mm
Power consumption	600W	600W	1000W

### Switching & Routing Features

IEEE Standard	IEEE 802.1D IEEE 802.3 IEEE 802.3u IEEE802.3ad IEEE802.3x IEEE 802.3z IEEE802.1Q IEEE 802.1p IEEE 802.1w IEEE 802.1x
Access control	Subscriber port filters by MAC, VLAN, IP
AAA (Authentication, Authorization, Accounting)	Radius, TACACS+, IEEE802.1x
VLAN	Supported for port-based VLAN, pass-through VLAN, GVRP, Super VLAN Stacking (QinQ)
Quality of Service	IEEE802.1p, ToS, Application port control, DiffServ, WRR, SP, SWRR
Link aggregation	Similar ports can be aggregated into one logical link with LACP
Routing protocols	RIP, OSPF, BGP, NAT

DHCP	Integrated DHCP server, Supports Client, Relay, Server
Multicast routing	IGMP V1/2/3, PIM-DM, PIM-SM, IGMP snooping
STP	802.1D(STP), 802.1w(RSTP), 802.1s (MSTP)
MPLS	Support Multiprotocol Label Switching, MPLS VPN, MPLS TE
IPv6	Supported
ACL	Standard and Extended ACL, support IP based, Source/destination IP, L3 IP protocol, TCP/UDP port, IP priority, and time ranger ACL
MAC Control	Supports port/MAC binding, MAC ACL
Flow Control	HOL blocking prevention, Half-duplex: Back pressure Full-duplex: IEEE 802.3x
ARP	Supported
Port Aggregation	Supports 802.3ad, loading balance
Customer Access	Supports 802.1x
Port Mirroring	Supported
Broadcast Control	Supported
Security	Supports MSU redundancy, hot swapped, VRRP
Console Interface	CLI, Web
Console Port	RS-232
Telnet	Supported
SNMP (MIB)	v1 / v2 / v3
SysLog	Supported
RMON	1, 2, 3, 9

## Ordering Information

<b>AE8000 Series Switch P2P</b>	<b>Description</b>
AE8006-Chassis	AE8006 Modular Switch chassis 6RU (3 slots, including 1 MSU slot and 2 network module slots)
AE8009-Chassis	AE8009 Modular Switch chassis 9RU (6 slots, including 2 MSU slot and 4 network module slots)
AE8012-Chassis	AE8012 Modular Switch chassis 12RU (10 slots, including 2 MSU slots and 8 network module slots)
<b>AE8000 Series Power Supply</b>	
AE80-PWR-AC-600	220V AC power supply for AE8006/AE8009
AE80-PWR-AC-1000	220V AC power supply for AE8012
AE80-PWR-DC	-48V DC power supply for AE8006/AE8009/AE8012
<b>AE8000 Switching Control</b>	
AE80-SC-192	AE8000 Switching Control Unit - 192G
AE80-SC-384	AE8000 Switching Control Unit - 384G
<b>AE8000 Series Modules</b>	
AE80-24GE-SFP	20-port 1000M SFP + 4-port 1000M SFP/TX Combo Module
AE80-24GE-TX	20-port 10/100/1000M TX + 4-port 1000M SFP/TX Combo Module

AE80-48FE-TX	48-port 10/100M TX Module
AE80-48GE-TX	48-port 10/100/1000M TX Module
AE80-48GE-SFP-MPLS	48-port 1000M SFP Module, support MPLS, Selective QinQ
AE80-2TE-SFPP	2-port 10G Ethernet Module (req. SFPP modules)
AE80-4TE-SFPP	4-port 10G Ethernet Module (req. SFPP modules)
<b>AE8000 Series SFP/XFP Modules</b>	
SFP-AF-LP-4931	SFP Plug-in, 100Mbps, 20km, TX=1490nm, RX=1310nm, LC/PC blue
SFP-AF-SP-4931	SFP Plug-in, 100Mbps, 20km, TX=1490nm, RX=1310nm, SC/PC Blue
SFP-AG-LP-4931	SFP Plug-in, 1Gbps, 20km, TX=1490nm, RX=1310nm, LC/PC Blue
SFP-AG-SP-4931	SFP Plug-in, 1Gbps, 20km, TX=1490nm, RX=1310nm, SC/PC Blue
SFPP-AT-LP-31-10	SFP+ Plug-in, 10Gbps, 10km, TX=1310/RX wide, on two single mode fibers, LC/PC Blue
SFPP-AT-LP-51-40	SFP+ Plug-in, 10Gbps, 40km, TX=1550/RX wide, on two single mode fibers, LC/PC Blue
SFPP-AT-LP-51-80	SFP+ Plug-in, 10Gbps, 80km, TX=1550/RX wide, on two single mode fibers, LC/PC Blue
SFPP-AT-LP-85-03	SFP+ Plug-in, 10Gbps, 300m, TX/RX 850nm, on two multimode fiber

## Contact Information

---



### Ascent Communication Technology Ltd

#### AUSTRALIA

140 William Street, Melbourne  
Victoria 3000, AUSTRALIA  
Phone: +61-3-8691 2902

#### CHINA

Unit 1933, 600 Luban Road  
200023, Shanghai CHINA  
Phone: +86-21-60232616

#### EUROPE

Pfarrer-Bensheimer-Strasse 7a  
55129 Mainz, GERMANY  
Phone: +49 (0) 6136 926 3246

#### HONG KONG SAR

Unit 9, 12<sup>th</sup> Floor, Wing Tuck Commercial Centre  
177 Wing Lok Street, Sheung Wan, HONG KONG  
Phone: +852-2851 4722

#### USA

2710 Thomes Ave  
Cheyenne, WY 82001, USA  
Phone: +1-203 816 5188

#### VIETNAM

15 /F TTC Building, Duy Tan Street  
Cau Giay Dist., Hanoi, VIETNAM  
Phone: +84 243 795 5917

**WEB:** [www.ascentcomtec.com](http://www.ascentcomtec.com)

**EMAIL:** [sales@ascentcomtec.com](mailto:sales@ascentcomtec.com)

Specifications and product availability are subject to change without notice.  
Copyright © 2014 Ascent Communication Technology Limited. All rights reserved.  
Ver. ACT\_AE8000\_Series\_DataSheet\_V1h\_Dec\_2014