

A10EP Ethernet Switch

Fast Ethernet PoE Switch



Product Overview

A10EP switch provides high bandwidth L2 access PoE (Power over Ethernet) solutions complied with IEEE802.3af, IEEE802.3at and RFC3621.

As a Power Source Equipment, A10EP is deployed at the Ethernet access layer in small/medium enterprise, residential area, campus, etc. Orion A10EP can offer power supply for PD devices such as wireless Access Point, IP phone and surveillance camera.

With 8 Fast Ethernet downlinks interfaces (up to 30 Watts per port) and 2 Gigabit Combo uplinks, A10EP guarantees demands of higher bandwidth coming with 802.11n Wifi, HD camera, etc. A10EP switch satisfy for residential or SME (Small, Medium Enterprise) services in terms of management (IEEE802.3ah OAM, IEEE802.1ag CFM, SNMP, Web management, etc.), multiple QoS profiles, bandwidth management, QoS, multiple network resiliency solutions, etc.

Product Description

The Orion Networks[©] A10EP PoE Access Switch supports a number of key features:

- Power over Ethernet Complied with IEEE802.3af/at and RFC3621, PSE ports on PoE switches can offer power up to 30W per port for remote devices, while advanced PoE features like auto/manual electricity management, overheating protection, priority configuration (critical/high/low) and port maximum power configuration are also supported. Support Time-sharing power supply based on RTC chip.
- **Higher bandwidth** Fast Ethernet level downlink interface and two gigabit combo uplink ports guarantee bandwidth requirement to ensure backup, protection, WiFi 802.11n, HD camera, etc.
- **Sophisticated Network** Networks are secured with port-isolation within individual VLAN, selective Q-in-Q function, MAC table threshold
- Security Assurance per port, broadcast/multicast/DLF storm control, and unique port loopback detection, STP, RSTP & MSTP and DHCP Client/Relay/Snooping/Option82/Option61.
- **Carrier Ethernet QoS** IEEE802.1p based QoS is supported in terms of 4 queues per port, SP/WRR/SP+WRR, bandwidth control, IGMP snooping, and multicast VLAN registration (MVR) to save bandwidth and optimize corresponding services.



Features

Switching mode	Store and forward mode 12Mbit switching buffer Supports jumbo frame
Packet Forwarding	MTU: 9,712 bytes (default) DLF Control
MAC Address Table	MAC address auto learning/add/remove/searching/statistic/aging MAC address aging time configuration (10-1000000 seconds) Up to 16K MAC addresses MAC address configure limit 1-255
VLAN	IEEE 802.1Q VLAN: 4K active VLANs 682 Flexible QinQ Support ingress/egress direction VLAN swapping
Link Aggregation	Up to 6 link aggregation groups and 8 ports per group Load balancing based on IP and MAC address Supports static LACP
Digital Diagnostic	Supports SFP digital diagnostic
STP	STP, RSTP & MSTP Supports 64 instances, 256 STG
OAM	IEEE802.3ah OAM including discovery, link performance, remote loopback, fault detection & performance stats per OAM standards OAM Active/Passive mode Supports OAM MIB Variable Get function and OAM Event function Supports extended OAM
QoS	Supports port/CoS/DSCP mapping Supports SP, WRR and SP+WRR scheduling Up to 8 queues per port Supports global queue scheduling Flow-based statistics/mirroring/rate-limiting/redirecting/VLAN-swapping Supports flow-based Cos, flow-based DSCP and IP priority change Rewriting of 802.1p CoS/DSCP per EVC WRR weight range:0-255
ACL	Supports MAC ACL Mask; Supports MAC/IP based ACL andLL2~L4 based ACL MAP Supports user customized ACL 22-63 bytes;
Routing	Supports static routing and default gateway



Features

Bandwidth Profile	64Kbps to 100,000Kbps per FE ports and 64Kbps to 1,000,000Kbps per GE 32Kbps granularity Max burst size 1047KB Ingress and Egress per port/vlan
Transparent Relay	BPDU, DOT1X, LACP,CDP, VTP, UDLD, PPVST and PAGP
Flow Control	IEEE 802.3x in full duplex mode Back pressure in half duplex mode Support port-based configurations
Multicast	3840 multicast addresses Static multicast group IGMP Snooping V1/V2/V3 Multicast filtering & unknown multicast discard Supports MVR
Storm Control	Broadcast, Multicast, DLF storm control Supports port-based and global-based storm control configuration Control mode: Global, bps and bust
Statistics	Support port, port dynamic statistics
LLDP	Supports discovery remote based on link layer Supports getting remote basic information
POE	Support IEEE 802.3af, IEEE 802.3at and RFC 3621 Support 30W for maximum 4 POE ports Supports power supply time arrangement
Security	Supports RADIUS, TACACS+ Supports port security IP Source Guard Supports MAC address and port bonding Supports dynamic ARP Inspection Supports PPPoE agent and DOT1x.



Specifications

Performance	Switching fabric: 5,6Gbps
Capacity	64MB DDR2 8MB flash
Physical interface	Management port: 1 console (RJ45) Client interfaces: 8x 10/100 Base-TX RJ45 port Network interfaces: 2x COMBO (2 x 100/1000Base-X SFP; 2 x 10/100/1000Base-T RJ45)
Power Specs	AC: 100~240V Full load: ≤ 150.0W, up to124W PoE power supply
Usage Conditions	Operating temp: -5~50 °C (23~122 °F); Storage temp: -25~60 °C (-13~140 °F); Humidity: 10~90% non condensing
Dimensions	300(L) x 220(W) x 43,6(H) mm
Weight	≤ 2.5Kg

Compliances

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Standards & Protocols	IIEEE 802.1Q VLAN, IEEE 802.3ad Link Aggregation, IEEE 802.1ad QinQ, IEEE 802.1D Spanning, Tree Protocol, IEEE 802.1s MSTP, IEEE 802.3af/at Power over Ethernet, IEEE 802.1x Security, IEEE 802.1p CoS Prioritization, IEEE 802.3x Flow Control, IEEE 802.3ah OAM, IEEE 802.1ag Connectivity, Fault Management, ITU Y.1731 Services OAM, Static Routing, IGMPv1/v2/v3 Multicast, RMON I and II Standards, SNMPv1/v2/v3, MEF9 & 14
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