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## AT-8020 POE Gigabit Enterprise Managed Switch with POE



### Description

AT-8020 POE Ethernet switch with management function is designed to meet rigorous mission critical applications , such as factory automation, intelligent transportation system (ITS), process control and also suitable for many military and utility market applications where environmental conditions exceed commercial product specifications. AT-8020 POE Gigabit Managed Switches provides a reliable infrastructure for your enterprise automation applications . AT-8020 POE supports 802.3af/at Power over Ethernet (POE), with a range of POE power budgets from 120W to 200W. AT-8020 POE support the Ethernet Ring Protection protocol, healing time can be less than 20ms, VLAN, QINQ, STP/RSTP, support QOS, ACL multicast, rich two layer exchange function, while providing CLI, Telnet, SSH, Http, Https and other management and network management software based on SNMPv1/v2c/v3.

### Features

- ◆ Comply with IEEE 802.3, 802.3u, 802.3/ab 10/100/1000BASE-T and other international standards
- ◆ IEEE802.3af/at port support standard PoE power supply, power up to 30W maximum power supply
- ◆ Automatic detection and recognition of the receiving equipment in accordance with IEEE802.3af/at standard
- ◆ Support cable fault detection, a key to restart and restore the factory function
- ◆ Comply with CE, FCC and other related standards
- ◆ Support spanning tree (STP), fast spanning tree (RSTP) protocol and multi spanning tree (MSTP) protocol
- ◆ Support VLAN 802.1Q, basic QinQ and flexible QinQ, support up to VLAN 4K table entry
- ◆ Support port aggregation and 1:1 port protection
- ◆ Support IEEE802.3ah, IEEE802.1ag and Y.1731 OAM Management Protocol
- ◆ Support for unified network management and Web Server configuration based on SNMP protocol
- ◆ Support Dying Gasp remote equipment fail alarm
- ◆ Support Ethernet ring network protocol ERPS, support ring protection protocol, protection switching time is less than 20ms
- ◆ Based on port aggregation, linear protection based on G.8031 protocol and the protection of the ring network based on G.8032 protocol;
- ◆ Support port loopback detection and device online upgrade
- ◆ It automatically pings the device on a configured schedule and if the device does not respond to the configured number of pings the switch toggles the PoE power on the port which automatically resets the device.

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## Specification

### Standard

IEEE 802.3	10Base-T 10Mbit/s Ethernet
IEEE 802.3u	100Base-TX, 100Base-FX, Fast Ethernet
IEEE 802.3ab	1000Base-T Gigabit/s Ethernet over twisted pair
IEEE 802.3z	1000Base-X Gigabit/s Ethernet over Fiber-Optic
IEEE 802.1d	STP (Spanning Tree Protocol)
IEEE 802.1w	RSTP (Rapid Spanning Tree Protocol )
IEEE 802.1s	MSTP (Multiple Spanning Tree Protocol)
ITU-T G.8032 /Y.1344	ERPS (Ethernet Ring Protection Switching)
IEEE 802.1Q	Virtual LANs (VLAN)
IEEE 802.1X	Port based and MAC based Network Access Control, Authentication
IEEE 802.3ad	Link aggregation for parallel links with LACP(Link Aggregation Control Protocol)
IEEE 802.3x	Flow control for Full Duplex
IEEE 802.1ad	Stacked VLANs, Q-in-Q
IEEE 802.1p	LAN Layer 2 QoS/CoS Protocol for Traffic Prioritization
IEEE 802.1ab	Link Layer Discovery Protocol (LLDP)
IEEE 802.3af	PoE (Power over Ethernet)
IEEE 802.3at	PoE+ (Power over Ethernet enhancements)

### Protocols

IGMPv1/v2/v3, GMRP, GVRP, SNMPv1/v2c/v3, DHCP Server/Client, , TFTP, SNTF, SMTP, RARP, RMON, HTTP, HTTPS, Telnet, Syslog, DHCP Option 66/67/82, SSH, LLDP, IPv6, NTP

### Switch Properties

Priority Queues: 8  
VLAN ID Range: VID 1 to 4094  
IGMP Groups: 2048

MAC Table Size: 8 K  
Packet Buffer Size: 4 Mbit  
Switching capacity: 53G

### Interface

RJ45 Ports: 8 10/100/1000M Base T adaptive  
Fiber Ports: 2 100/1000M Base SFP  
Console Port: RS-232 (RJ-45)  
Button: Reset button

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## PoE

Standard	IEEE 802.3at/ 802.3af
Ping Assignment	PoE supports (Pin1, 2 for Positive (V+), PIN3, 6 for Negative(V-))
POE Schedule	Supported
Auto Reset power	Supported

## Certification

EMC	CE
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## Operation

Temperature	0 to 55°C
Humidity	10 TO 90% non-condensing

## Power

AC	90~260 VAC (Option)
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## Dimension

Size(W x H x D)	280 x 44 x 160 mm
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## Software features

VLAN	VLAN IEEE 802.1q VLAN, up to 4094 802.1Q VLAN VID IEEE 802.1q VLAN, up to 4094 Groups IEEE 802.1ad Q-in-Q MAC-based VLAN, up to 256 entries IP Subnet-based VLAN, up to 128 entries Protocol-based VLAN (Ethernet, SNAP, LLC), up to 128 entries VLAN Translation, up to 256 entries GVRP (GARP VLAN Registration Protocol ) MVR ( Multicast VLAN Registration)
Link Aggregation	Static (Hash with SA, DA, IP, TCP/UDP port), up to 14 trunk group Dynamic (IEEE 802.3ad LACP), up to 14 trunk group Per group up-to 8 port
Spanning Tree	IEEE802.1d STP, IEEE802.1w RSTP, IEEE802.1s MSTP
Loop Protection	Supported
ITU-T G.8032 / Y.1344	Recovery time <20ms
ERPS	

## QoS

Class of Service	IEEE802.1p 8 active priorities queues for per port
Traffic Classification QoS	IEEE802.1p based CoS IP Precedence based CoS IP DSCP based CoS QCL(QoS Control List): Frame Type, Source/

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Bandwidth Control for Ingress	Destination MAC, VLAN ID, PCP, DEI
Bandwidth Control for Egress	QCE(QoS Control Entry): Protocol, Source IP, IP Fragment, DSCP, TCP/UDP port number
DiffServ	Per port based
Storm Control	Per port based Per queue / Per port shaper
	Remarking
	Unicast, Broadcast, Multicast

## IP Multicasting

IGMP / MLD Snooping	IGMP Snooping v1, v2, v3 / MLD Snooping v1, v2 Port Filtering Profile Throttling, Fast Leave Maximum Multicast Group : up to 1022 entries Query / Static Router Port
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## Security

IEEE 802.1X	Port-Based, MAC-Based
ACL	up to 256 entries for L2 / L3 / L4 L2 : Mac address SA/DA/VLAN L3: IP address SA/DA, Subnet L4: TCP/UDP
RADIUS	Authentication & Accounting
TACACS+	Authentication & Accounting
SSH	Supported

## Management

CLI	
CLI	Cisco® like CLI
Web Based Management	
Telnet	Server
SNMP	V1, V2c, V3
SW & Configuration	HTTP
Upgrade	
RMON	RMON I (1, 2, 3, 9 group), RMON II
MIB	RFC1213 MIB II, Private MIB
DHCP	Server, Client, Relay, Snooping, Snooping option 82, Relay option 82
IP Source Guard	Supported
Port Mirroring	Supported

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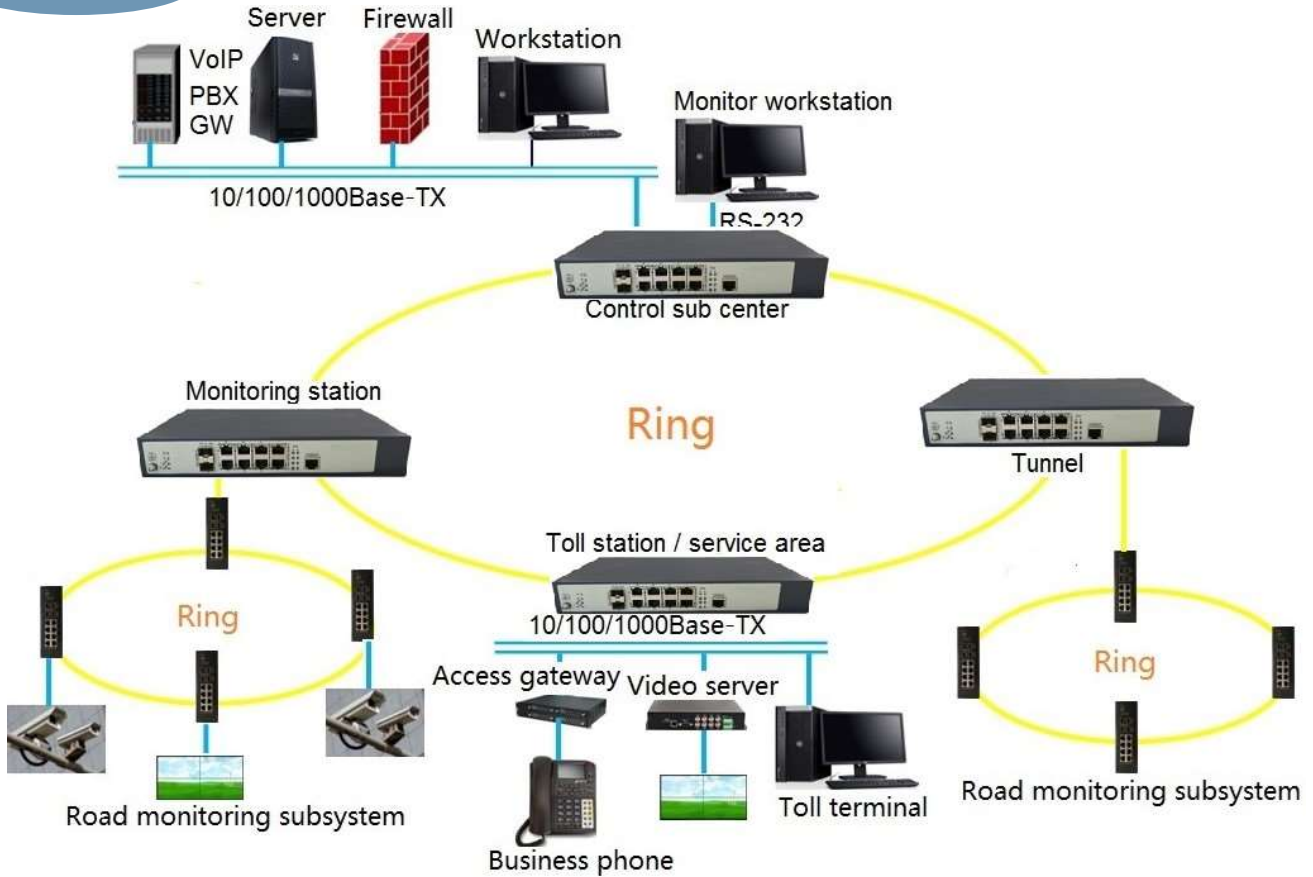
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Application



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