Ernitec Electra
Managed PoE switch T08

A new generation of high-performance hardware and software platforms that provide flexible, cost-effective Gigabit access and uplink ports. Supports complete security protection mechanisms, comprehensive ACL/QoS policies, and various VLAN functions. It is easy to manage and maintain, and meets the user's needs for easy management, high security and other network devices, applicable for network access, aggregation and core application scenarios in campus, hotel and enterprise areas. Support OC Linux Kernel version 3.18 in web site.

This 8 port Gigabit PoE+ switch with 2 Gigabit SFP uplink ports is designed using a Broadcom Chipset. It provides 8 x 10/100/1000M RJ45 Ports and all 8 are PoE+ Ports. The PoE ports can automatically detect and supply power for the IEEE802.3af and IEEE802.3at compliant Powered Devices (PDs), like Voip Phone, PoE APs, IP Phones, IP cameras, etc.

The switch also benefits from Lightning protection on both the power input and Lan ports.

AI Smart POE Switch, 8* 1000Mbps RJ45 port(POE is available), 2* 1000Mbps SFP port.
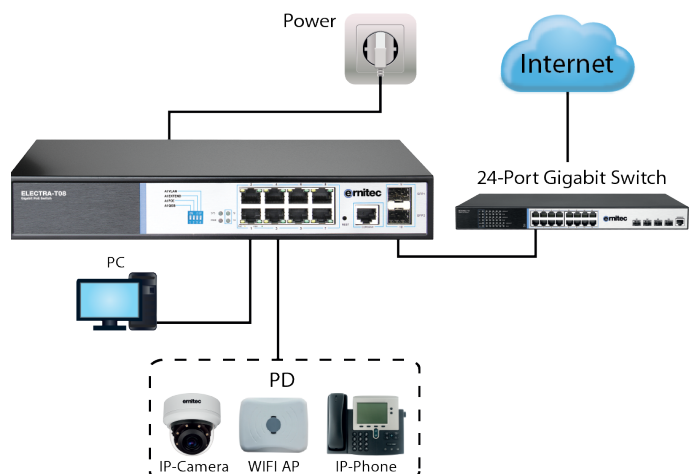
5 working modes:

- **Standard mode:** All ports communicate freely;

- **AI VLAN:** Avoid the internet storm and enhance the network ability;

- **AI Extend:** Extend 250M transmission;

- **AI PoE:** Automatic self checking, reboot the device while find it fake dead;

- **AI QoS:** Video data first, more fluent transmission.

Product introduction

- 8 1000Mbps RJ45 ports (support PoE power supply)

- 2 Gigabit SFP ports

- Supports 5 working modes: standard switching, AI VLAN, AI Extend ,AI PoE,AI QoS mode.

- Support port management, PoE management, link aggregation, spanning tree, loop protection,multicast, and attack defense

- Support HI PoE, IEEE802.3af/at,Max.46W output power single port

- Total power:150W

Installation diagram (for reference only)

Power

Internet

24-Port Gigabit Switch

PC

PD

IP-Camera   WIFI AP   IP-Phone

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Intelligent control

- Standard switching mode: All ports communicate freely, suitable for ordinary data transmission environment.

- AI VLAN mode: Separating 1-8 ports from each other, can effectively restrain network storm and improve network performance.

- AI Extend mode: Designed for monitoring application scenarios, 1-8 ports support 250 meters long distance power supply.

- AI PoE mode: Automatic self checking, reboot the device while find it fake dead

- AI QoS mode: Video data first, more fluent transmission

- Intelligent PoE management: Custom port PoE output power, custom PD working time, custom port priority.

- Hardware watchdog: Monitor the working status of the equipment and find abnormal quick restart.

Powerful multi-service processing capabilities

- Supports IEEE 802.1Q VLANs, MAC VLANs, IP VLANs, and voice VLANs. You can flexibly assign VLANs according to different requirements.

- Supports GVRP to implement dynamic VLAN distribution, registration, and attribute propagation. This reduces manual configuration and ensures correct configuration.

- Supports the VLAN VPN function. The public network access device encapsulates the outer VLAN tag for the private network packets of the user, so that the packets carry two VLAN tags across the public network.

- Support QoS, support port-based, 802.1P-based and DSCP-based three priority modes and WFQ, SP, WRR, SP+WRR four queue scheduling algorithms.

- Supports ACLs by configuring matching rules, processing operations, and time permissions to filter packets and provide flexible security access control policies.

- Supports IGMP V1/V2 multicast protocol and supports IGMP Snooping to meet the requirements of multi-terminal HD video surveillance and video conference access.

- Supports PoE management POE power limitation, POE chip status check, setting PoE port priority, and custom PoE power supply time period.

- Support hardware watchdog, the device has a suspended animation state and automatically restarts to resume normal working state.

- Support IPV6 Ping, IPv6 Tracert, IPv6 Telnet IPV6 SSH IPv6 SSL.

Complete security protection mechanism

- Supports IP address, MAC address, and port ternary binding to filter packets.

- Supports ARP protection, and protects against ARP spoofing and ARP flood attacks, such as gateway spoofing and man-in-the-middle attacks.

- Support IP source protection to prevent illegal address spoofing including MAC spoofing, IP spoofing, and MAC/IP spoofing.

- Supports DoS protection and supports attacks such as Land Attack, Scan SYNFIN, Xmascan, and Ping Flooding.

- Supports 802.1X authentication, provides authentication functions for LAN computers, and controls the authorization status of controlled ports based on the authentication results.

- Supports port security. When the port learns the maximum number of MAC addresses, it stops learning to prevent MAC address attacks and control port network traffic.

- Support DHCP Snooping to effectively prevent private DHCP servers and ensure the legality of the DHCP server.

Various reliability protection

- Support loop protection, automatically detect switch loop status, and block loop ports.

- Supports the STP/RSTP/MSTP spanning tree protocol to eliminate Layer 2 loops and implement link backup.

- Supports spanning tree security to prevent devices in the spanning tree network from being subjected to various forms of malicious attacks.

- Supports static aggregation and dynamic aggregation, which effectively increases link bandwidth, implements load balancing, link backup, and improves link reliability.

Easy operation and maintenance

- Supports various management and maintenance methods such as Web network management, CLI command line (Console, Telnet), and SNMP (V1/V2/V3).

- Supports encryption methods such as HTTPS, SSL V3, and SSHV1/V2 for more secure management.

- Support RMON, system log, and port traffic statistics for network optimization and transformation.

- Supports cable detection, ping detection, and Tracert detection operations to easily analyze failed network nodes.

- Support LLDP to facilitate the network management system to query and judge the communication status of the link.

- Supports CPU monitoring, memory monitoring, ping detection, Tracert detection, and cable detection.

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Specifications

Network port	8* 10/100/1000Mbps RJ45 port2 gigabit SFP fiber port1 Console port
PoE	1000Mbps full Duplex, 8* 10/100/1000Mbps RJ45 port support PoE+ power Total max 150W Single port max 46W
Network protocol and standard	IEEE802.3i, IEEE802.3u, IEEE802.3x, IEEE802.3z, IEEE802.3ab, IEEE802.3af, IEEE802.3at
Performance	Bandwidth: 20Gbps Packet; Forwarding rate: 14.88Mpps; Forwarding mode: store-and-forward Support 8K MAC address table
Frame filtering and transmission rate	Packet forwarding rate: 14.88Mpps
LED indicator	10 Link/Act LED indicator, 8 POE LED indicator, 1 Power LED indicator, 1 SYS LED indicator
Power	100-240V/50-60Hz
Dimensions	Size: L x W x H: 285mm × 180mm × 44mm
	Weight: 2,2 kg
Environment	Operating temperature: 0°~40℃; storage temperature: -40~70℃
	Operating Humidity: 10%~90%, non-condensing; Storage Humidity:5%~95%, non-condensing

Caution

1. For your safety, please don't open the casing of the product.
2. Please be careful of the risk of strong current and security protection.
3. Please select the right power adaptor provided power for PoE switch, before using please confirm if is it according with the requirement of PoE switch.
4. Please don't use PoE switch under the humid environment, keep free from water.
5. Please start the power after the circuit is connected.
6. Please don't plug-in and plug-out the connection cable when product is powered on.
7. Please don't use PoE switch under somewhere with more dust and EME.
8. Please don't put heavy thing on PoE switch.
9. According to the IEEE802.3AF/AT standard, please use the Cat.5 or above, transmission distance 250m.
10. Please don't exceed the maximum output power of PoE switch when it connects more than one PD device.
11. PoE switch for indoor use. If you want to use outdoors, please install a waterproof box.

Indicator status

Indicator	Indicator description	Normal status	Abnormal status
PWRw	Power indicator	Yellow light on	If the light is not on, please check external socket power supply if it is a normal/adapter power connection, if it is correct or not, etc.
LINK/ACT	PD device connection indicator	Green light on	If the light is not on, please check the corresponding RJ45 port if connected network devices, PoE power normal, cable connected correctly, cable damaged, network devices destroyed or not, etc.

Item Number & Packing

Item Number	ELECTRA-T08
Power Cord	1 x CEE 7/7 TO IEC C13
Manual	Yes
Mounting Option	Desktop or Rackmount (Hardware included)