

ES2448-62

24-Port 10/100/1000Base-T + 4-Port 10G SFP+
Layer 2+ Full Management High Power PoE Switch



- 24-Port Gigabit Copper + 4-port 10G SFP+
- 1G SFP/10G SFP+ Available
- 802.3az Energy Efficient Ethernet
- 88G Non-Blocking Switching Capability
- Layer 2+ Full Managed Software Features
- 4K VLAN, 8 queues QoS, Advanced VLANs
- MSTP, LACP, LLDP, sFlow
- 802.1X, RADIUS, TACAS+, ACL
- IPv6, IPv4/v6 Multicast Filtering

Key Features

4 10 Gigabit SFP+ Open Slots

The switch equips with 4 10G SFP+ open slots as the uplink ports, the 10G uplink design provides an excellent solution for expanding your network from 1G to 10G. By 10G speed, this product provides high flexibility and high bandwidth connectivity to another 10G switch or the Servers, Workstations and other attached devices which support 10G interface. The user can also aggregate the 10G ports as Trunk group to enlarge the bandwidth.

Full Layer 2 Management Features

The switch includes full Layer 2+ Management features. The software set includes up to 4K 802.1Q VLAN and advanced Protocol VLAN, Private VLAN, MVR...features. There are 8 physical queues Quality of Service, IPv4/v6 Multicast filtering, Rapid Spanning Tree protocol to avoid network loop, Multiple Spanning Tree Protocol to integrate VLAN and Spanning Tree, LACP, LLDP; sFlow, port mirroring, cable diagnostic and advanced Network Security features. It also provides Console CLI for out of band management and SNMP, Web GUI for in band Management.

Advanced Security

The switch supports advanced security features. For switch management, there are secured HTTPS and SSH, the login password, configuration packets are secured. The port binding allows to bind specific MAC address to the port, only the MAC has the privilege to access the network. The 802.1X port based Access Control, every user should be authorized first when they want to access the network. AAA is the short of the Authentication, Authorization and Accounting with RADIUS, TACAS+ server. Layer 2+ Access Control List allows user to define the access privilege based on IP, MAC, Port number...etc.

Specifications

Standard	<p>Ethernet: IEEE 802.3, 802.3u, 802.3ab, 802.3ae IEEE 802.3az Energy Efficient Ethernet (EEE) Protocol: IEEE 802.3x - Flow Control, IEEE 802.1Q – VLAN, IEEE 802.1p - Class of Service, IEEE 802.1D - Spanning Tree, IEEE 802.1w - Rapid Spanning Tree, IEEE 802.1s - Multiple Spanning Tree, IEEE 802.3ad - Link Aggregation Control Protocol (LACP), IEEE802.1v - Protocol VLAN, IEEE 802.1AB - LLDP (Link Layer Discovery Protocol), IEEE 802.1X - Access Control</p>
Interface	<p>Number of Port: 28 10/100/1000Base RJ-45 Port : 24, Auto-negotiation, Auto MDI/MDIX 1G SFP/10G SFP+ : 4</p>
Performance	<p>Switching Capacity: 88G bps MAC Address Table Size: 32K Forwarding Rate: 95.2Mpps Packet Buffer: 4Mb</p>
L2 Features	<p>Flow Control: 802.3x (Full-duplex)ort/ Back-Pressure (Half-duplex) Spanning Tree: IEEE 802.1D-2004(Includes IEEE 802.1w): Rapid Spanning Tree Protocol 802.1s Multiple Spanning Tree Protocol Loop Detection VLAN: IEEE 802.1Q Tagged Based, Max. VLAN Group: 4K QinQ Port-based VLAN Voice VLAN Private VLAN MVR MAC-Based VLAN Protocol-Based VAN Link Aggregation: IEEE 802.3ad with LACP: 14 trunks/ up to 8 port per trunk Static Trunk: 14 trunks/ up to 8 port per trunk Max. Group:14 Max. Ports/Group:8 IGMP Snooping: IGMP Snooping v1/v2/v3 IPv6 MLD Snooping v1/v2 Querier support/ IGMP Filtering, IGMP Leave Proxy, Immediate Leave Storm Control: Broadcast/ Multi-cast/ Un-known Unicast Jumbo Frame Support: 10K</p>



PoE Features	<p>802.3af/at Compliant Max. Power Output Per Port: 30W Power Consumption : 250W / 500W Current Sharing Internal Power: In PD Classification Power Management:</p> <ul style="list-style-type: none"> - Enable/Disable per-port Priority - Setting per-port Overloading - Protection per-port - Power Level Setting per-port
QoS Features	<p>Number of Priority queue: 8 queues/ port Scheduling for priority queue : WRR/Strict Priority scheduling/Hybrid CoS :</p> <ul style="list-style-type: none"> - 802.1p/ IP Precedence/ IP TOS Precedence - IP DSCP/ Port based Priority <p>Rate Limiting: Ingress/Egress: 1Kbps/ 1pps granularity DiffServ (RFC2474) remarking</p>
Security	<p>User Name / Password Protection User Privilege: up to 15 levels IEEE 802.1x: Port-based Access Control IP Source Guard MAC Based Authentication Web-based Authentication HTTPS SSHv2 RADIUS: Authentication/ Accounting TACACS+: Authentication ACL (Access control list)</p>
Management	<p>Command Line Interface (CLI) Web Based Management Telnet Access Management Filtering: SNMP/ WEB/SSH/TELNET/ SNMP: v1/v2c/v3 RMON: RMON (1,2,3, & 9 groups) DHCP: Client/ Relay/ Option82/ Snooping Event/Error Log: Local Flash/ Remote Server Software Download/ Upgrade: HTTP Configuration Download / Upload sFlow Port Mirroring: One to One/ Many to One Remote Ping NTP/LLDP UPnP EEE Configuration</p>



	Cable Diagnostics IPv6 Configuration
Power Input	100~240VAC
Mechanical	Dimension mm(H*W*D) : 45*440*220 Weight : 3.0 kg
Operating Temperature	0~40 °C
Humidity	5~90% (non-condensing)
Certification	CE, FCC Class A

