Smart Architecture of Espadana

Designing, Production,Customization and Consultant Service

in Network and Fiber Optic System

Technical Specification

SAE-SF2432000SFP-QTGM

24×100/1000Mbps SFP ports & 4x Gigabit RJ45 & 4x 10Gigabit SFP fiber ports Core Switch

Product Description

- 24x1000M SFP Optical Ports + 4x Gigabit RJ45 Ports + 4x10Gigabit Optical Ports
- Total power: 60W
- L2+, with high performance management system, including VLAN based on port, VLAN based on 802.1Q, QOS, IGMP Snooping, RSTP, Broadcast Storm Restraint, Port Aggregation, Port mirroring, Port management, SNMP, RADIUS, and NTP etc
- Optical Standard: 100BASE-FX, 1000BASE-X
- Support dynamic/ static binding for IP, MAC, VLAN, Port and other elements users' definition
- Support STP (802.1D) & RSTP (802.1w)

Full Description

The **SAE-SF2432000SFP-QTGM** is a smart Layer 2+ core switch designed for efficient data transmission between fiber optic uplinks and server ports or other optical devices. It features **24 Gigabit SFP fiber ports** and **4 RJ45Gbps uplink ports and 4 SFP 10Gbps uplink**, fully compliant with IEEE802.3, IEEE802.3u, IEEE802.3x, and IEEE802.3 1000BASE-T standards.

This switch offers extensive managed features, including dynamic/static binding based on IP, MAC, VLAN, or Port. It supports port isolation to enhance security by blocking traffic between adjacent devices in the same broadcast domain. Built-in storm control protects against broadcast, multicast, and unknown unicast flooding. ARP inspection prevents ARP spoofing attacks, improving overall network security.

User-friendly management is available via a web interface (HTTP/HTTPS), as well as CLI, Telnet, and Console access, making it suitable for professional network administrators. A one-touch reset feature simplifies maintenance. Constructed with high-quality components, it ensures excellent stability, resistance to electromagnetic interference, and adaptability to harsh environments. The switch integrates a multi-layer PCB design, an advanced switching chip, and a self-developed OS to optimize performance, packet processing speed, and reliability.

Application

- Core managed switch for huge networks
- IP cameras monitoring systems and transmitting systems
- Access points wireless systems and transmission data
- IP telephone, virtual PABX and intelligent unmanned systems
- Management and support Intelligent transportation supervisory （ITS）
- Monitoring TV medical and management
- School, campus, and… monitoring and remote control

Technical Specification

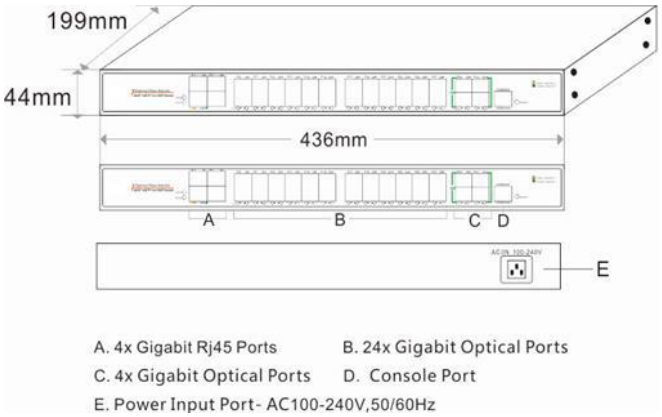
Product	SAE-SF2432000SFP-QTGM
Performance	
Buffer Memory	32M
Bandwidth	128Gbps
Forwarding Rate@64byte	131Mpps
MAC	32K
Twisted Pair Transmission	10BASE-T: Cat3,4,5 UTP (≤100 meter) 100BASE-TX: Cat5 or later UTP (≤100 meter) 1000BASE-T: Cat5e or later UTP (≤100 meter)
Optical Cable(fiber)	Multi-mode: 850nm 0 ~ 550M, single-mode: 1310nm 0 ~ 40KM, 1550nm 0 ~120KM.
Power supply/out put	100-240VAC/ <60W
LED	Power indicator: PWR (yellow), System indicator: SYS (yellow), Network indicator: Link/Act (yellow), Fiber port: L/A(green)
Interface	
ports	24*100/1000M SFP ports 4*10/100/1000M RJ45 ports 4*1/10G(SFP+) Ports 1*Console Port
SFP ports	Gigabit SFP optical fiber interface multi-mode, single fiber / double fiber optical module.
Protocol	

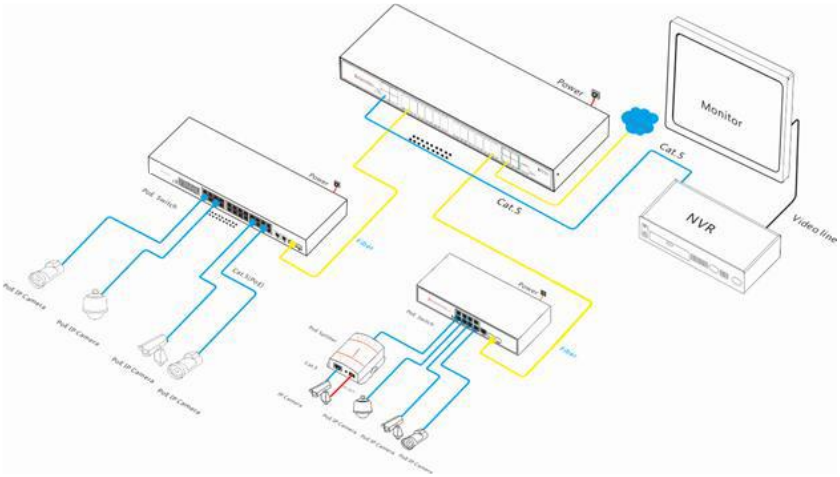
Network protocol	IEEE 802.3,10BASE-T Ethernet; IEEE 802.3u, fast Ethernet Standard; IEEE 802.3ab, gigabit Ethernet Standard; IEEE 802.3z, gigabit Ethernet Fiber Standard;(AOC fiber cable) IEEE 802.3x, full-duplex Ethernet data link layer flow control;
Layer2+ Switching	
Layer 3 Function	Support L2+ Layer 3 soft routing forwarding, non-linear speed Support static routing / default routing 128, 1024 ARP software forwarding
Spanning Tree	STP (IEEE802.1d), RSTP (IEEE802.1w), MSTP (IEEE802.1s)
Aggregation	Support aggregation for 4G port Support LACP Support static polymerization
Port Mirroring	Support multiple to single Port mirroring, no limit for quantity of mirroring source ports
Storm Control	Prevents traffic on a LAN from being disrupted by a broadcast, multicast, or unicast storm on a port, Support port storm threshold setting
Port Isolation	Support downstream ports isolated from each other, while opening communication with upstream ports
Port Speed Limit	Support port-based input/output bandwidth management
Port Flow Control	Support full-duplex PAUSE frame-based control;
VLAN	Support up to 4K VLANs simultaneously (out of 4096 VLAN IDs) 4K VLAN based on IEEE802.1Q Protocol based VLAN Access, Trunk, Hybrid three types of port configuration, Q in Q configuration
QoS	Diff-Serv QoS Each port supports 8 output queues Support 802.1p/DSCP priority mapping Support queue scheduling mechanism (SP, WRR, SP+WRR) priority tag Mark/Remark stream based packet filtering Support for stream-based redirection Support flow-based speed limit

Multicast	Provide IGMP Snooping V1/V2 and Provide1024 multicast groups at most. Provide the user's quick departure mechanism Provide MLD Snooping V1/V2 Provide multicast VLAN
DHCP	DHCP Client Support DHCP Snooping DHCP Serve DHCP Relay
Mirror	Bi-directional traffic mirroring supporting the basic port
Security Features	Hardware support port-based IP+MAC Binding Hardware support port-based ARP inspection detection
Safety Characteristics	Support user grading management and password protection Support IEEE802.1X authentication / centralized MAC address authentication Support AAA&RADIUS authentication Support the number of MAC address learning restrictions Support MAC address black hole Support SSH 2 to provide secure passwords for user login. Support SSL to ensure data transmission security Support port isolation Support the speed limit function of ARP message Support IP source address protection Support ARP intrusion detection function Support against DoS attacks Support port broadcast message suppression Support host data backup mechanism Binding capabilities of IP+MAC+VLAN+ port
ACLs	L2 to L4 packet filtering function, It is able to match the first 80 bytes of the message, provide based on the source MAC address, destination MAC address, source IP address, destination IP address, IP protocol type, TCP/UDP port, TCP/UDP port range, VLAN and other definition ACL. Support ACL based on port and VLAN
Network Cable Line Sequence	
Network Cable	Support Auto-MDIX, automatic Identification straight-through cable and crossover cable
Management	
Maintenance and Web Interface	Support configuration file upload/download Support update packet upload Support WEB reset Reset by pressing key Support system log save/output

Negotiation Mode	
Mode	Support port auto-negotiation function (auto-negotiation transmission rate and duplex mode)
Environmental aspects	
Working Environment	Operating Temperature: -20°c to 55°C Storage Temperature: -40 ° ~ 55 °C Operating humidity 5% to 90%
Dimension	436*199*44mm

Product Display





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