



Smart Architecture of Espadana

Designing, Production, Customization and Consultant Service
in Network and Fiber Optic System



Technical Specification

SAE-SF2432000SFP-QGM

24x100/1000Mbps SFP ports & 4xGigabit RJ45 & 4 Gigabit SFP fiber slot ports Core Switch





Product Description

- 24 x 1000M SFP Optical Ports + 4 x Gigabit RJ45 Ports + 4 x Gigabit 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

This SAE-SF2432000SFP-QGM core switch Gigabit smart L2+ can prepare telecommunication between fiber optic uplink ports to the server port as well as other fiber optic devices. 24 Gigabit fiber ports and 4 RJ45 Up-link ports prepared any 10/100/1000 Mbps link can supply industry-standards IEEE802.3, IEEE 802.3u, IEEE 802.3x, IEEE802.3 1000BASE-T for all fiber ports.

The SAE-SF2432000SFP-QGM switch provides a network point for data transmission on any managed features that designers require to control their networks. Support dynamic or static binding by users' definition, such as IP, MAC, VLAN, PORT, etc. Support port isolation, to prevent communication between two neighbor network equipment within the same broadcast domain, for reducing network risk; Supports perfect storm control function which can suppress broadcast, multi-cast, and unicast storm; Support specific ARP inspection which can effectively prevent "ARP spoofing attack" created by hackers or attackers via ARP packets. This device prepares a bunch of convenient management and maintenance by easy WEB interface (http and https protocol supported), also you can conveniently operate and configure all kinds of function in this switch. Support management by CLI, Telnet, Console port, which is more suitable for professional network administrator; It also allow reset by one-press, making maintenance easier. SAE-SF2432000SFP-QGM made by high quality of components were rigorous screened, have superior performance in stability, environmental adaptability. The product planned in a way of better resistance and ability to corrosion and electromagnetic interference. Power input also made a suitable and reliable types of power, to get more powerful suitability to environment. Using leading network switching chip, multiple layers PCB design, as well as self-developed



Applications

- 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-QGM
Performance	
Buffer Memory	32M
Bandwidth	598Gbps
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	DC 12-48 V/ <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*Gigabit (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



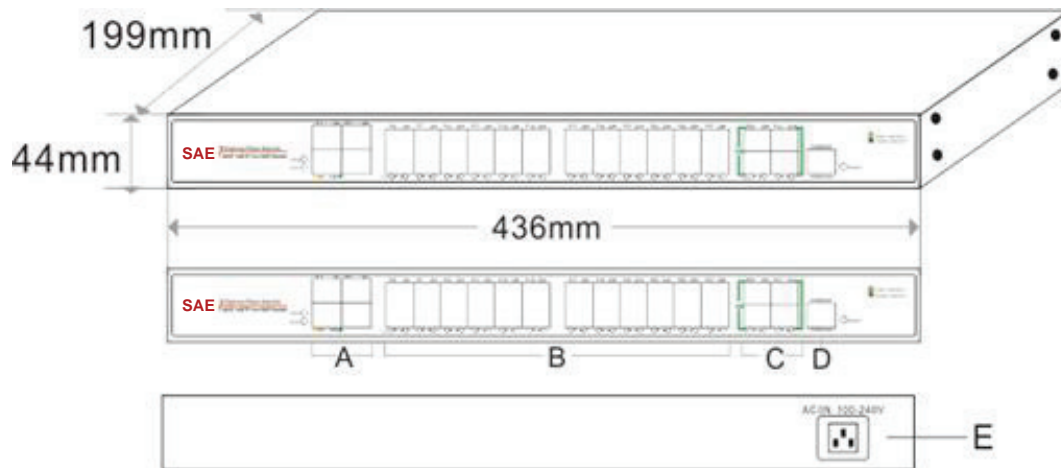
QoS	Diff-Serv QoS Each port supports 8 output queues Support 802.1p/DSCP priority mapping Support queue scheduling mechanism (SP, WRR, SP+WRR) priority tag Mark/Remark stream based packet filtering Support for stream-based redirection Support flow-based speed limit
Multicast	Provide IGMP Snooping V1/V2 and Provide 1024 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 ~ 55°C Storage Temperature: -40°C ~ 55°C Operating humidity 5% ~ 90%
Dimension	436*199*44mm



Product Size Display



- A. 4x Gigabit RJ45 Ports
- B. 24x Gigabit Optical Ports
- C. 4x Gigabit Optical Ports
- D. Console Port
- E. Power Input Port- AC100-240V, 50/60Hz

Product Application Display

