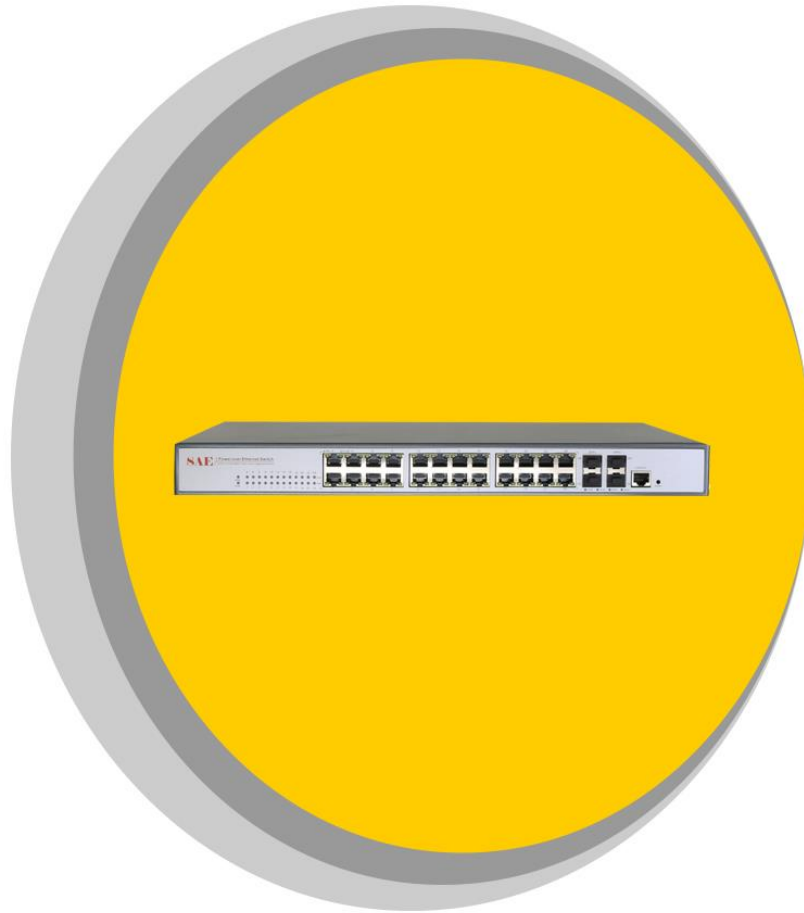




## Smart Architecture of Espadana

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



### Technical Specification

**SAE-SW2400-QTGM-L3**

24x10/100/1000Base-T RJ45 ports and 4x10G SFP+ fiber slot ports





## Product Description

- supports “Gigabit Ethernet port and 10G SFP+ uplink port “combination
- Support non-blocking wire speed forwarding
- Support full duplex based on IEEE802.3x and half duplex based on backpressure.
- Support IEEE 802.1Q VLAN, users can flexibly divide VLAN according to needs, and support QinQ configuration
- Support QoS, support port based, 802.1P based and DSCP based three priority modes and Equ, SP, WRR, SP+WRR four queue scheduling algorithms.
- ACL supports the filtering of data packets by configuring matching rules
- Support G.8032 industrial fast Ring network ERPS Protocol network convergence time  $\leq 20\text{ms}$

## Full Description

The **SAE-SW2400-QTGM-L3** is a 10G uplink managed Ethernet fiber switch. It has 24x10/100/1000Base-T RJ45 ports and 4x10G SFP+ fiber slot ports. Each port can support wire-speed forwarding. The **SAE-SW2400-QTGM-L3** has the layer two plus full network management function, supports IPV4/IPV6 management, supports static route full line rate forwarding, supports complete security protection mechanism, complete ACL/QoS policy and rich VLAN functions, and is easy to manage and maintain. Supports multiple network redundancy protocols STP/RSTP/MSTP (<50ms) and (ITU-T G.8032) ERPS to improve link backup and network reliability. When one-way network fails, communication can be quickly restored to ensure important Uninterrupted communication for applications. According to the actual application requirements, you can configure multiple application services such as port traffic control, VLAN division, and SNMP through the Web network management mode. **SAE-SW2400-QTGM-L3** 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 switch software system. With combination of hardware and software, it improves product quality from forwarding stability, packet processing speed, and other work capability.



**Application**

- 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 contro

**Technical Specification**

<b>Product</b>	SAE-SW2400-QTGM-L3
<b>Interface</b>	24x10/100/1000Base-T RJ45 ports (Data) 4x10G uplink SFP+ fiber slot ports (Data) 1xConsole RS232 port (115200,N,8,1)
<b>Managed Type</b>	L3
<b>Network Protocol</b>	IEEE802.3 10BASE-T; IEEE802.3i 10Base-T; IEEE802.3u 100Base-TX; IEEE802.3ab 1000Base-T IEEE802.3z 1000Base-X IEEE802.3ae 10GBase-SR/LR IEEE802.3x
<b>Ethernet Port Feature</b>	Port 1-24 can support 10/100/1000Base-T(X) auto detect, full/half duplex MDI/MDI-X adaptive
<b>Fiber Port Feature</b>	Gigabit SFP /10G SFP+ fiber interface (Fiber module is not included, need to order separately, module options include single/multi-mode, single/dual fiber, LC)
<b>Forwarding Mode</b>	Store and Forward(Full Wire Speed)
<b>Switching Capacity</b>	598Gbps (non-blocking)
<b>Forwarding Rate@64byte</b>	107.14Mpps



**24x10/100/1000Base-T RJ45 ports and 4x10G SFP+ fiber slot ports**

<b>MAC</b>	32K
------------	-----

<b>Buffer Memory</b>	32M
<b>Twisted Pair Transmission</b>	10BASE-T: Cat3,4,5 UTP (≤100 meter); 100BASE-TX: Cat5 or later UTP (≤100 meter) 1000BASE-T: Cat5e or later UTP (≤100 meter)
<b>Optical Fiber Cable</b>	Multi-mode: 850nm 0~300M (10G), 850nm 0~500M (1.25G); Single-mode: 1310nm 0~40KM, 1550nm 0~120KM.
<b>Total PWR / Input Voltage</b>	60W (AC100-240V)
<b>Power Consumption</b>	Standby < 23W; Full Load < 35W
<b>Power Supply</b>	Built-in power supply, AC 100~240V 50-60Hz 1A
<b>LED Indicator</b>	Power indicator: PWR (yellow); system indicator: SYS (yellow); network indicator: Link (yellow); Fiber port indicator L/A (green)
<b>Reset Button</b>	Support one key to restore factory settings
<b>Operation TEMP/Humidity</b>	-20~+55°C; 5%~90% RH Non condensing
<b>Storage TEMP /Humidity</b>	-40~+80°C; 5%~95% RH Non condensing
<b>Dimension (L*W*H)</b>	440x290x44.5mm
<b>Net /Gross Weight</b>	<3.5kg / <4.0kg
<b>Lightning protection / Protection Level</b>	Lightning protection : 4KV 8/20us; Protection Level: IP30
<b>Certification</b>	CCC; CE mark, commercial; CE/LVD EN60950; FCC Part 15 Class B; RoHS;
<b>Warranty</b>	3 years , lifelong maintenance.



<b>Managed Feature</b>	
<b>Layer3 Function</b>	<p>Support L3 managed function,</p> <p>Support IPV4/IPV6 management</p> <p>Support layer3 soft routing (weak three tier) forwarding,</p> <p>Support different network segments, communication between different VLAN</p> <p>Support static routing / default routing 128, 1024 ARP software forwarding</p>
<b>VLAN</b>	<p>Support port based VLAN (4K), IEEE802.1q</p> <p>Support protocol based VLAN</p> <p>Support Access, Trunk, Hybrid three types of port configuration</p> <p>Support QinQ configuration</p>
<b>Port Aggregation</b>	<p>Support LACP</p> <p>Support static polymerization</p> <p>Support the largest 8 aggregation groups, each aggregation group supports 8 ports.</p>
<b>Spanning Tree</b>	<p>STP (IEEE802.1d)</p> <p>RSTP (IEEE802.1w)</p> <p>MSTP (IEEE802.1s)</p>
<b>Industrial Ring Network Protocol</b>	<p>Support G.8032 (ERPS), support 255 loops at most, and supports 1024 devices per ring.</p> <p>The self-healing time of the ring network is less than 20ms</p>
<b>Multicast</b>	<p>Support IGMP Snooping V1/V2 and support 1024 multicast groups at most.</p> <p>Support the user's quick departure mechanism</p> <p>Support MLD Snooping V1/V2</p>
<b>Image</b>	<p>Bi-directional traffic mirroring supporting the basic port</p>
<b>QoS</b>	<p>Diff-Serv QoS</p>



**24x10/100/1000Base-T RJ45 ports and 4x10G SFP+ fiber slot ports**

	<p>Each port supports 8 output queues</p> <p>Support 802.1p/DSCP priority mapping</p> <p>Support queue scheduling mechanism (SP, WRR, SP+WRR) priority tag Mark/Remark</p> <p>stream based packet filtering</p> <p>Support for stream based redirection</p> <p>Support flow based speed limit</p>
<b>ACL</b>	<p>Support L3 to L4 packet filtering function, can 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.</p> <p>Support ACL based on port and VLAN</p>
<b>DHCP</b>	<p>Support DHCP Client</p> <p>Support DHCP Snooping</p> <p>Support DHCP Serve</p> <p>Support DHCP Relay</p>
<b>Safety Characteristics</b>	<p>Support user grading management and password protection</p> <p>Support IEEE802.1X authentication / centralized MAC address authentication</p> <p>Support AAA&amp;RADIUS authentication</p> <p>Support the number of MAC address learning restrictions</p> <p>Support MAC address black hole</p> <p>Support SSH 2 to provide secure passwords for user login.</p> <p>Support SSL to ensure data transmission security</p> <p>Support port isolation</p> <p>Support the speed limit function of ARP message</p> <p>Support IP source address protection</p>

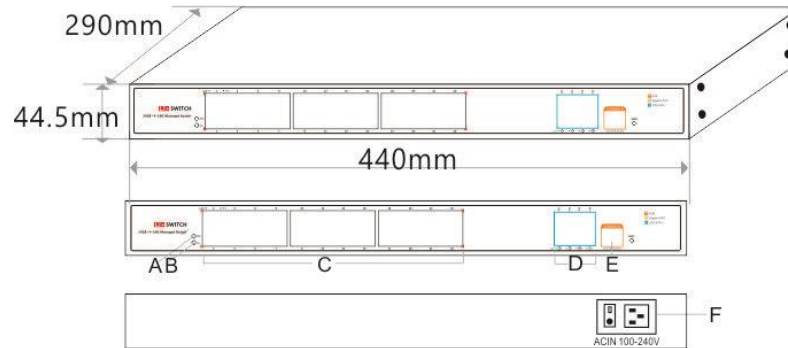


**24x10/100/1000Base-T RJ45 ports and 4x10G SFP+ fiber slot ports**

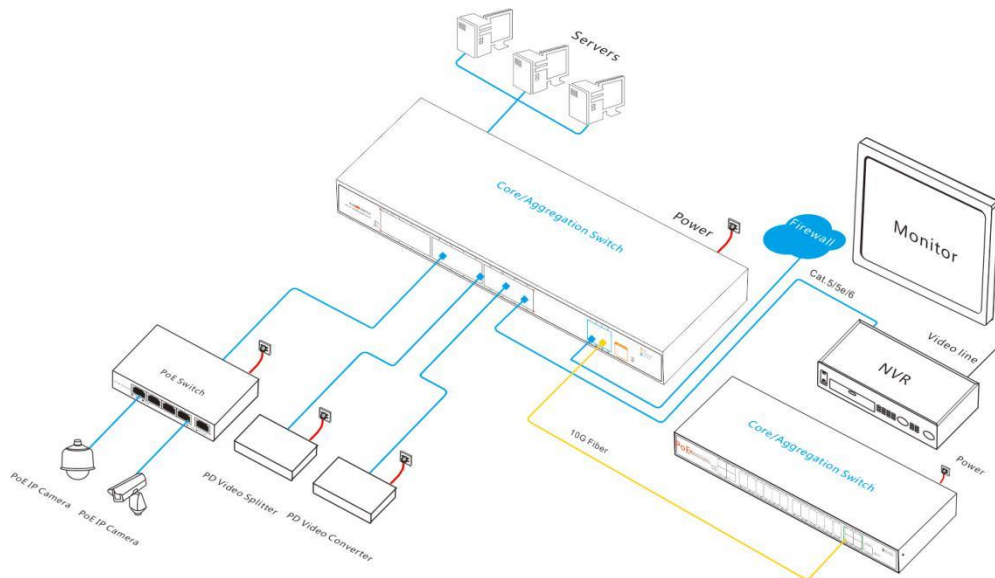
	<p>Support ARP intrusion detection function</p> <p>Support against DoS attacks</p> <p>Support port broadcast message suppression</p> <p>Support host data backup mechanism</p> <p>Binding capabilities of IP+MAC+VLAN+ ports</p>
<p><b>Management And Maintenance</b></p>	<p>Support Console/AUX Modem/Telnet/SSH2.0 CLI command line configuration</p> <p>Support WEB network management (HTTPS)</p> <p>Support FTP, TFTP, Xmodem, SFTP file download management</p> <p>Support SNMP V1/V2C/V3</p> <p>Support one bond reduction</p> <p>Support NTP clock</p> <p>Support system work log</p> <p>Support Ping detection</p> <p>Support cable state detection</p> <p>Support CPU instant utilization status view</p>



**Product Application Display**



- A. PWR LED Indicator
- B. SYS LED Indicator
- C. 24\*10/100/1000M RJ45 Ports
- D. 10G SFP Port
- E. Console Port
- F. Power Input Port - AC100-240V, 50/60Hz



**Technical Specification of:**  
**SAE-SW2400-QTGM-L3**