Overview

KSM Solutions 24 Port SFP Managed Switch L2+

8 x 10/100/1000M RJ45 ports
24 x 10/100/1000M SFP fiber slot ports
4 x 1/10G SFP+ fiber slot ports
Each port can support unblocked packets - wire-speed forwarding

L2+ full network management function, supports IPV4/IPV6 management, static route full line rate forwarding, security protection mechanism, ACL/QoS policy and enhanced VLAN functions. Easy to operational management and configuration. Supports multiple network redundancy protocols STP/RSTP/ MSTP (<50ms) and (ITU-T G.8032) ERPS (<20ms) improving link backup and network reliability.

Redundant or network link failure is quickly restored ensuring uninterrupted communication between applications. Easy to configure network application services such as port traffic control, VLAN division, and SNMP through the Web network management mode.

Suitable for industrial Ethernet application environments and can be used within industrial, transportation networks, rail transit, power industry, mining, petroleum, marine, heavy industry.

General Features

Gigabit multi fiber port access, 10G uplink

- Supports Gigabit Ethernet port, Gigabit SFP port and 10G SFP+ uplink port combinations.
- Support non-blocking wire-speed unblocked packet forwarding.
- Support full-duplex based on IEEE802.3x and half-duplex based operation.

Strong business processing capability

- IEEE802.1Q VLAN, flexible VLAN division, Voice VLAN, and QinQ configuration.
- QoS, Priority mode based on 802.1P, Port & DSCP, queue scheduling algorithms including EQU, SP, WRR & SP+WRR.
- ALC, filter data packet through configuring matching rules, processing operation & time permission, and provide flexible and safe access control.
- IGMP V1/V2 and IGMP Snooping.
- ERPS/STP/RSTP/MSTP.
- Static and dynamic aggregation.

Security

- 802.1X authentication.
- Port isolation, Storm packet control/regulation.
- IP-MAC-VLAN-Port binding.

Stablity and reliablilty

- Low power consumption, Fan less circuitry, aluminum casing.
- Redundancy power supply design, providing long life and stable power output.
- CCC,CE, FCC, RoHS.
- Clear device status indication via LED indicators for PWR, SYS, Link , L/A.

Easy operation and maintenance management

- HTTPS, SSLV3, and SSHV1/V2.
- RMON, system log, LLDP, and port traffic statistics.
- CPU monitoring, memory monitoring, Ping test, and cable diagnose.
- Web management, CLI command line (Console, Telnet), SNMP (V1/V2/V3).

Specifications

Interface Characteristics	
Fixed Port	8 x 10/100/1000Base-T RJ45 ports (Data) 24 x 100/1000Base-X uplink SFP fiber slot ports (Data) 4 x 1/10G uplink SFP+ fiber slot ports (Data) 1 x Console RS232 port (115200,N,8,1) Alarm switch(FAULT) 1 x AC100-240V power input port 2 x DC12V power input ports (support anti-reverse protection)
Ethernet Port	Port 1-8 supports 10/100/1000Base-T,auto-sensing, Full/half duplex MDI/MDI-X Recognition
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 Fiber Port	Gigabit SFP /10G SFP+ optical fiber interface, default matching optical modules (optional order single-mode / multi-mode, single fiber / dual fiber optical module. LC)
SFP Port Expansion	Turbo overclocking 2.5G optical module and ring
Optical Cable/ Distance	Multi-mode: 850nm / 0 ~ 500M, 0 ~ 300M (10G); Single-mode: 1310nm / 0 ~ 40KM, 1550nm/ 0 ~ 120KM.
Chip Parameter	
Network Management Type	L2+
Network Protocol	IEEE802.3 10BASE-T, IEEE802.3i 10Base-T IEEE802.3u 100Base-TX , IEEE802.3ab 1000Base-T IEEE802.3z 1000Base-X IEEE802.3ae 10GBase-LR/SR IEEE802.3x
Forwarding Mode	Store and Forward (Full Wire Speed) unblocked Packet Forwarding
Switching Capacity	598Gbps (non-blocking)
Forwarding Rate@64byte	107.14Mpps
MAC	32K
Buffer Memory	32M
Jumbo Frame	9.6K
LED Indicator	Power: PWR (yellow), system: SYS (yellow), network: Link/Act (yellow), Fiber port : L/A (green)
Reset Switch	Yes, supports one key to restore factory settings
Power	
Total PWR / Input Voltage	60W (AC100-240V)
Power Consumption	Standby <35W, Full Load <50W
Power Supply	Built-in power supply, AC 100~240V 50-60Hz 0.65A
Power Input Interface	Dual input power port design, AC power supply priority, support anti-reverse protection, power-off automatic switching DC connection; 2*DC12V power input ports; Alarm switch, 1*AC power input port
Physical Parameter	
Operation TEMP / Humidity	-40~+80°C;5%~90% RH Non condensing
Storage TEMP / Humidity	-40~+85°C;5%~95% RH Non condensing
Dimension (L*W*H)	440*298*44mm
Net /Gross Weight	<5.3kg / <5.8kg
Installation	Desktop type ,19 inch 1U cabinet installation

www.ksm.com.au
Tel: 0061(0)2 8003 3372 Email: sales@ksm.com.au

Specifications

Network Management Features

Interface	IEEE802.3X (Full-duplex) Port temperature protection setting Port green Ethernet Energy-saving setting Broadcast storm control based on port speed The speed limit of the message flow in the access port. The minimum particle size is 64Kbps.
Layer 3 Features	L2+ network management IPV4/IPV6 management L3 software routing and forwarding Communication between different network segments and different VLANs Static route, Default route @ 128 pcs, APR @ 1024 pcs
VLAN	4K VLAN based on port, IEEE802.1q VLAN based on the protocol VLAN based on MAC Voice VLAN, QinQ configuration Port configuration of Access, Trunk, Hybrid
Port Aggregation	LACP, Static aggregation Max 18 aggregation groups and 8 ports per group.
Spanning Tree	STP (IEEE802.1d),RSTP (IEEE802.1w),MSTP (IEEE802.1s)
Industrial Ring Network Protocol	G.8032 (ERPS), Recovery time less than 20ms 250 Ring at most, Max 254 devices per ring.
Multicast	MLD Snooping v1/v2,Multicast VLAN IGMP Snooping v1/v2, Max 250 multicast groups, Fast log out
Port Mirroring	Bidirectional data mirroring based on port
QoS	Flow-based Rate Limiting Flow-based Packet Filtering 8*Output queues of each port 802.1p/DSCP priority mapping Diff-Serv QoS, Priority Mark/Remark Queue Scheduling Algorithm (SP, WRR, SP+WRR)
ACL	Port-based Issuing ACL,ACL based on port and VLAN L2 to L4 packet filtering, matching first 80 bytes message. Provide ACL based on MAC, Destination MAC address, IP Source, Destination IP, IP Protocol Type, TCP/UDP Port, TCP/UDP Port Range, and VLAN, etc.
Security	IP-MAC-VLAN-Port binding ARP inspection, Anti-DoS attack AAA & RADIUS,MAC learning limit Mac black holes, IP source protection IEEE802.1X & MAC address authentication Broadcast storm control, Backup for host datum SSH 2.0,SSL,Port isolation, ARP message speed limit User hierarchical management and password protection
DHCP	DHCP Client, DHCP Snooping, DHCP Server, DHCP Relay
Management	One-key recovery Cable Diagnose, LLDP Web Management (HTTPS) NTP, System work log, Ping Test CPU instant utilization status view Console/AUX Modem/Telnet/SSH2.0 CLI Download & Management on FTP, TFTP, X modem, SFTP,SNMP V1/V2C/V3 ONV NMS - smart network management system platform (LLDP+SNMP)
System	Category 5 Ethernet network cable Web browser: Mozilla Firefox 2.5 or higher, Google browser chrome V42 or higher, Microsoft Internet Explorer10 or later; TCP/IP, network adapter, and network operating system (such as Microsoft Windows, Linux, or Mac OS X) installed on each computer in a network

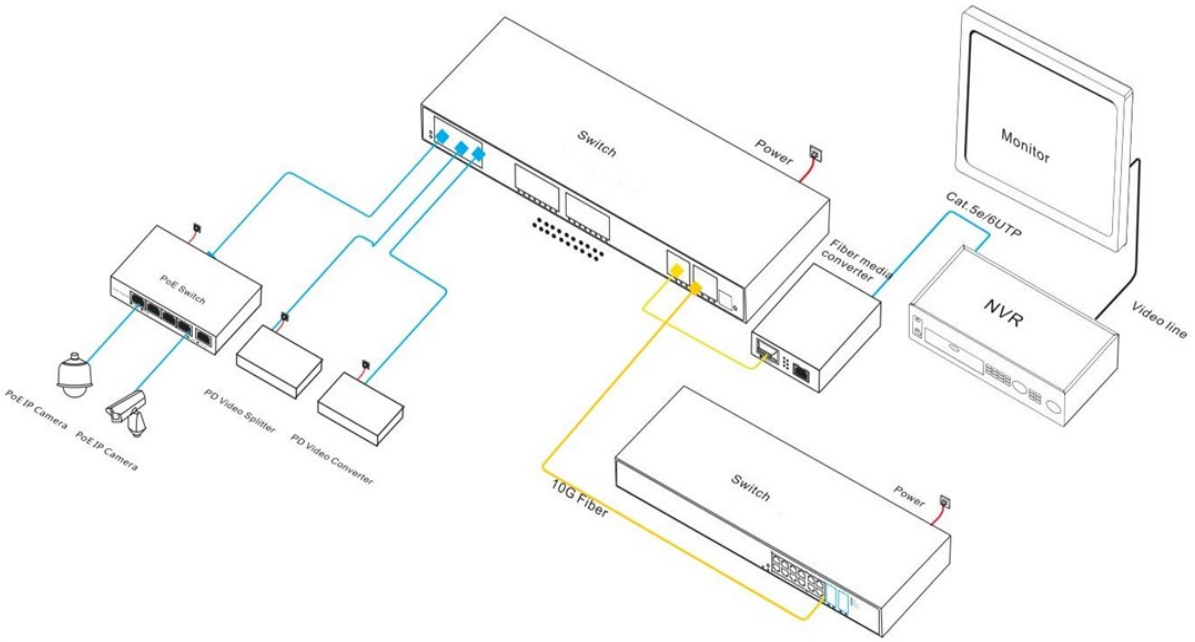
Specifications

Certification & Warranty

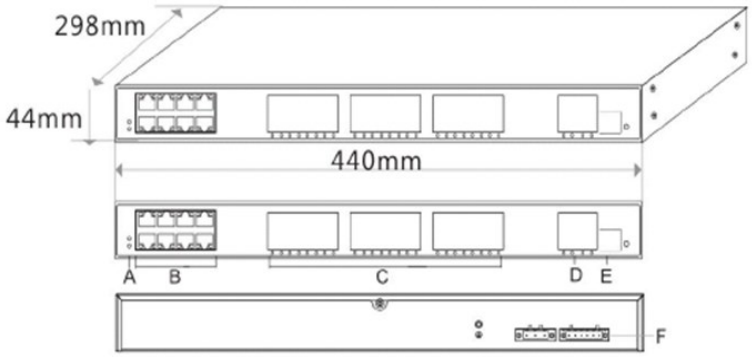
Lightning protection / protection level	Lightning protection: 6KV 8/20us; Protection level: IP40 IEC61000-4-2(ESD):±8kV contact discharge,±15kV air discharge IEC61000-4-3(RS):10V/m(80~1000MHz) IEC61000-4-4(EFT): power cable:±4kV; data cable:±2kV IEC61000-4-5(Surge):power cable:CM±4kV/DM±2kV; data cable:±4kV IEC61000-4-6(radio frequency transmission):10V(150kHz~80MHz) IEC61000-4-8(power frequency magnetic field):100A/m;1000A/m ,1s to 3s IEC61000-4-9(pulsed magnet field):1000A/m IEC61000-4-10(damped oscillation):30A/m 1MHz IEC61000-4-12/18(shockwave):CM 2.5kV,DM 1kV IEC61000-4-16(common-mode transmission):30V; 300V,1s FCC Part 15/CISPR22(EN55022):Class A IEC61000-6-2(Common Industrial Standard)
Mechanical Properties	IEC60068-2-6 (anti vibration) IEC60068-2-27 (anti shock) IEC60068-2-32 (free fall) IEC60068-2-6 (anti vibration) IEC60068-2-27 (anti shock) IEC60068-2-32 (free fall)
Certification	CCC;CE mark, commercial; CE/LVD EN60950;FCC Part 15 Class B; RoHS CCC;CE mark, commercial; CE/LVD EN60950;FCC Part 15 Class B; RoHS
Warranty	1 year

Application & Dimensions

Application



Dimensions



A.Working indicator
B. 8* RJ45 Ports
C. 24*Gigabit SFP Ports
D.4*1/10G SFP+ Ports
E.Console port
F.AC/DC dual input port