

DES - S4MS12M

16 Ports Full Gigabit Managed Ethernet Fiber Switch

4*GE+12*GF SFP Managed Fiber Switch



Introduction

The DES - S4MS12M series is a full gigabit managed Ethernet fiber switch. It has 4*10/100/1000vBase-T RJ45 ports and 12*100/1000Base-X SFP fiber slot ports. Each port can support wire-speed forwarding.

The DES - S4MS12M 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. It satisfies high-density network application environment and is suitable for medium, large-scale scenes such as hotel, campus, park, shopping mall, scenic spot, hospital, bank to form an economical, efficient, and reliable communication network.



TECHNICAL SPECIFICATION-

MODEL	DES - S4MS12M		
	4*10/100/1000Base-T RJ45 ports (Data)		
Interface	12*100/1000Base-X SFP ports (Data)		
	1*Console RS232 port (115200, N,8,1)		
Managed Type	L2+		
Network Protocol	IEEE802.3 10BASE-T; IEEE802.3i 10Base-T;		
	IEEE802.3u 100Base-TX;		
	IEEE802.3u 100Base-FX;		
	IEEE802.3ab 1000Base-T		
	IEEE802.3z 1000Base-X		
	IEEE802.3x		
Ethernet Port Feature	Port 1-4 can support 10/100/1000Base-T auto detect, full/half duplex		
	MDI/MDI-X adaptive		
Fiber Port Feature	155M SC /gigabit SFP fiber interface (Fiber module is not included, need to		
	order separately, module options include single/multi-mode, single/dual		
	fiber, LC)		
Forwarding Mode	Store and Forward (Full Wire Speed)		
Switching Capacity	32Gbps (non-blocking)		
Forwarding Rate@64byte	20.83Mpps		
MAC	8K		
Buffer Memory	6M		
Jumbo Frames	9.6K		
	10BASE-T: Cat3,4,5 UTP (≤100 meter);		
Twisted Pair Transmission	100BASE-TX: Cat5 or later UTP (≤100 meter)		
	1000BASE-T: Cat5e or later UTP (≤100 meter)		
Optical Fiber Cable	Multi-mode:850nm 0~300M(10G) ,850nm 0~500M (1.25G); Single-		
	mode:1310nm 0~40KM,1550nm 0~120KM.		
Power Supply	Built-in power supply, AC 100~240V 50-60Hz 1A		
	Power indicator:PWR(yellow); system indicator:SYS(yellow); network		
LED Indicator	indicator: Link(yellow); Fiber port indicator L/A(green)		
Reset Button	yes, support one key to restore factory settings		
Operation TEMP/Humidity	-20~+55°C;5%~90% RH Non condensing		
Storage TEMP /Humidity	-40~+80°C;5%~95% RH Non condensing		
Net /Gross Weight	<1.5kg / <2kg		
Installation	Desktop,19-inch 1U cabinet installation		
Lightning protection /			
Protection Level	Lightning protection :4KV 8/20us; Protection Level: IP30		
Certification	CCC; CE mark, commercial; CE/LVD EN60950; FCC Part 15 Class B; RoHS;		
Warranty	3 years, lifelong maintenance.		



MANAGED SERIES FEATURES

Interface	IEEE802.3x flow control (full duplex)
	Broadcast storm suppression for port rate
	support speed limit for incoming and offline message traffic, with a minimum
	particle size of 64Kbps.
	Temperature protection setting
	Energy saving configuration of port EEE Ethernet
	Support DDM
VLAN	Support port based VLAN (4K), IEEE802.1q
	Support protocol based VLAN
	Support for MAC address-based VLAN
VEAIN	Support Voice VLAN
	Support Access, Trunk, Hybrid three types of port configuration
	Support QinQ configuration
Port Aggregation	Support LACP
	Support static polymerization
	Support the largest 7 aggregation groups, each aggregation group supports
	8 ports.
	STP (IEEE802.1d)
Spanning Tree	RSTP (IEEE802.1w)
	MSTP (IEEE802.1s)
Industrial Ring Network	Support G.8032 (ERPS), support 255 loops at most, and supports 254
	devices per ring.
Protocol	The self-healing time of the ring network is less than 20ms
	Support IGMP Snooping V1/V2 and support 1024 multicast groups at most.
NA distance	Support the user's quick departure mechanism
Multicast	Support MLD Snooping V1/V2
	Support multicast VLAN
Image	Bi-directional traffic mirroring supporting the basic port
	Diff-Serv QoS
	Each port supports 8 output queues
	Support 802.1p/DSCP priority mapping
0-5	Support queue scheduling mechanism (SP, WRR, SP+WRR)
QoS	priority tag Mark/Remark
	stream based packet filtering
	Support for stream-based redirection
	Support flow-based speed limit
ACL	Support L2 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.
	Support ACL based on port and VLAN
Spanning Tree Industrial Ring Network Protocol Multicast Image QoS	Support static polymerization Support the largest 7 aggregation groups, each aggregation group supports 8 ports. STP (IEEE802.1d) RSTP (IEEE802.1w) MSTP (IEEE802.1s) Support G.8032 (ERPS), support 255 loops at most, and supports 254 devices per ring. The self-healing time of the ring network is less than 20ms Support IGMP Snooping V1/V2 and support 1024 multicast groups at most. Support the user's quick departure mechanism Support MLD Snooping V1/V2 Support multicast VLAN Bi-directional traffic mirroring supporting the basic port Diff-Serv QoS Each port supports 8 output queues Support 402.1p/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 Support L2 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.



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 2.0 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+ ports			
	Support DHCP Client			
	Support DHCP Snooping			
DHCP	Suport DHCP Serve			
	Suport DHCP Relay			
	Support Console/AUX Modem/Telnet/SSH2.0 CLI command line			
	configuration			
	Support WEB network management (HTTPS)			
	Support FTP, TFTP, Xmodem, SFTP file download management			
	Support SNMP V1/V2C/V3			
	Support one bond reduction			
Management and	Support NTP clock			
Maintenance	Support system work log			
	Support Ping detection			
	Support cable state detection			
	Support CPU instant utilization status view			
	Support link layer discovery protocol LLDP			
	Support NMS intelligent management center			
System Requirements	Web browser: Mozilla Firefox 2.5 or higher, Google browser chrome V42 or			
	higher, Microsoft Internet Explorer10 or later;			
	Cat5e or later Ethernet cable;			
	TCP/ IP, network adapter and network operating system (Microsoft			
	Windows, Linux, or Mac OSX) installed on on every computer in the network.			
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HIGHLIGHTS-

- All series supports "Gigabit Ethernet port and Gigabit uplink SFP fiber slot port "combination, which enables users to flexibly build networking to meet the needs of various scenarios;
- Support QOS, STP/RSTP, IGMP, DHCP, SNMP, WEB, VLAN, ERPS, DDM etc.;
- ☆ Switching capacity:Gbps, MAC table:8K;
- ☆ Compatible with 1U rack, built-in internal power adapter;

Packing List-

CONTENT	QTY	UNIT
16 Ports Managed Fiber Switch with 12*1G SFP	1	SET
DES - S4MS12M		
User Guide	1	PC
Warranty Card	1	PC