

# 10 Ports Full Gigabit Managed Industrial POE Switch **DES-42S2MG-IND**



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Our Latest Network Switches



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## DES-42S2MG-IND

### 10 Ports Full Gigabit Managed Industrial POE Switch

- ☆ 8\*10/100/1000M + 2\*1000M SFP per Port Industrial PoE Switch, 1-8 ports support IEEE 802.3af/at;
- ☆ PoE port support AF/AT intelligent recognition. Standard power is 15.4W/port, Maximum power: 30W/port;
- ☆ Only support 1,2(+)/3,6(-);
- ☆ Support L2+ full network management, PoE network management and configuration;
- ☆ Switching capacity: 20Gbps, MAC table: 8K;
- ☆ Input voltage: DC48-57V, Redundant dual power 5-bit industrial terminals;
- ☆ IP protection level: IP40; Rail-type installation;

## Introduction;

The DES-42S2MG-IND is a full Gigabit managed industrial PoE switch. It has 8\*10/100/1000M PoE ports and 2\*100/1000 SFP fiber slot ports, port 1-8 can support IEEE 802.3af/at standard POE power supply, single port POE power up to 30W, and the maximum POE output power is 120W (at-240W). As a POE power supply device, it can automatically detect and identify the electrical equipment that meets the standard and supply power through the cable. It can supply the POE terminal equipment, such as wireless AP, network camera, network telephone, industrial sensor and so on, to meet the demand for high density PoE power supply network environment. It is suitable for intelligent transportation, rail transportation, electric power industry, mining, metallurgy and green energy construction and so on. A reliable communication networks. Managed model supports a variety of network redundancy protocol STP/RSTP/MSTP (<50ms). When one-way network fails, communication can be recovered quickly to ensure uninterrupted communication of important applications. DES-42S2MG-IND industrial series products fully follow industrial product design and material. The shell adopts aluminum alloy to enhance heat dissipation efficiency, IP40 protection grade, and ensures the stable operation of the equipment in bad environment. According to the actual application needs, through Web, CLI, SNMP network management, POE power supply management, port flow control, VLAN division, STP, RSTP and other functions of the application service configuration.

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## Technical Specifications;

Model	<b>DES-42S2MG-IND</b>
Interface	8*10/100/1000Base-TX PoE ports (Data/Power) 2*10/100/1000M SFP ports (Data) 1 * RS232 console port (115200, N,8,1) 2 set of V+, V- redundant DC power interface (5 Pin Phoenix terminal)
PoE Port	Port 1-8 supports POE @ IEEE802.3af/at
Network Protocol	IEEE802.3 10BASE-T; IEEE802.3i 10Base-T; IEEE802.3u 100Base-TX; IEEE802.3ab 1000Base-T; IEEE802.3z 1000Base-X; IEEE802.3x
PoE Standard	IEEE802.3af/at, and power budget of min 140Watts
PoE Power per port	Sufficient to operate the CCTV Camera connected
Ethernet Port Feature	10/100/1000BaseT (X) automatic detection, full / half duplex MDI/MDI-X adaptive
SFP Port Characteristic	Gigabit SFP optical fiber interface, default matching optical modules, need to buy separately, (optional order mode / multi-mode, single fiber / double fiber optical module)
Forwarding Mode	Store and Forward (Full Wire Speed)
Switching Capacity	20Gbps (Non-blocking)
Forwarding Rate	14.88Mpps
MAC	8K
Buffer Memory	4.1M
Jumbo Frame	10K
Twisted Pair Transmission	10BASE-T: Cat3,4,5 UTP ( $\leq 100$ meter) 100BASE-TX: Cat5 or later UTP ( $\leq 100$ meter) 1000BASE-T: Cat5e or later UTP ( $\leq 100$ meter)
Optical Cable	Multimode: 850nm 0 ~ 500M; Single mode: 1310nm 0 ~ 40KM, 1550nm 0 ~ 120KM.
Power Supply Pin	Only support 1/2 (+), 3/6 (-) 4-core power supply
Working Voltage	48-57VDC; 5 Pin industrial Phoenix terminal, support anti-reverse protection
Max Power Per Port	30W; IEEE802.3af/at
Total PWR / Input Voltage	120W/ 240W (48-57VDC)
Power Consumption	Standby: <10W; Full load: <240W
LED Indicator	System indicator: SYS (green); Network Indicator: Link (yellow); SFP Indicator: L/A (green); PoE Indicator: PoE (green)
Power Supply	No, optional 48V/120W or 48V/240W industrial power supply

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## Technical Specifications;

Model	DES-42S2MG-IND
Operation TEMP / Humidity	-40~+75°C;5%~90% RH Non condensing
Storage TEMP / Humidity	-40~+85°C;5%~95% RH Non condensing
Dimension	149.2 mm *122 mm *50 mm
Net /Gross Weight	<0.8kg / <1.2kg
Lightning protection / protection level	Lightning protec on: 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 magne c 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 B IEC61000-6-2(Common Industrial Standard)
Mechanical Properties	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;
Business features (only restricted management function models)	
Port	Support IEEE802.3x flow control (full duplex) Support for broadcast storm suppression based on port rate support speed limit for incoming and offline message traffic, with a minimum particle size of 64Kbps. Support port temperature protection settings Support port EEE green Ethernet energy saving configuration
PoE Management	Support total power limit configuration for POE power supply Support PoE output power allocation per port, close / start af/at Support PoE output priority configuration per port Support PoE work status per port display Support power delay start Support PoE work and time scheduling
Layer 3 Function	L2+ network management func on Layer 3 Function Support IPV4/IPV6 management Support layer3 soft routing (weak three tier) forwarding, Support different network segments, communication between different VLAN Support static routing / default routing 128, 1024 ARP software forwarding
VLAN	Support port based VLAN (4K), IEEE802.1q,HTTPS/SSH, SNMP Management , IGMP support

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## Technical Specifications;

Model	<b>DES-42S2MG-IND</b>
	Support protocol based VLAN Support Voice VLAN Support for MAC address-based VLANs Support Access, Trunk, Hybrid three types of port configuration Support QinQ configuration
Port Aggregation	Support LACP Support static polymerization Support the largest 8 aggregation groups, each aggregation group supports 8 ports.
Spanning Tree	Support STP (IEEE802.1d) Support STPRSTP (IEEE802.1w) Support STP MSTP (IEEE802.1s)
Industrial Ring Network Protocol	Support G.8032 (ERPS), support 255 loops at most, and supports 1024 devices per ring. The self-healing time of the ring network is less than 20ms
Multicast	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
Mirror	Bi-directional traffic mirroring supporting the basic port
QoS	Support Diff-Serv QoS Each port supports 8 output queues Support 802.1p/DSCP priority mapping Support queue scheduling mechanism (SP, WRR, SP+WRR) Support priority tag Mark/Remark Support 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
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



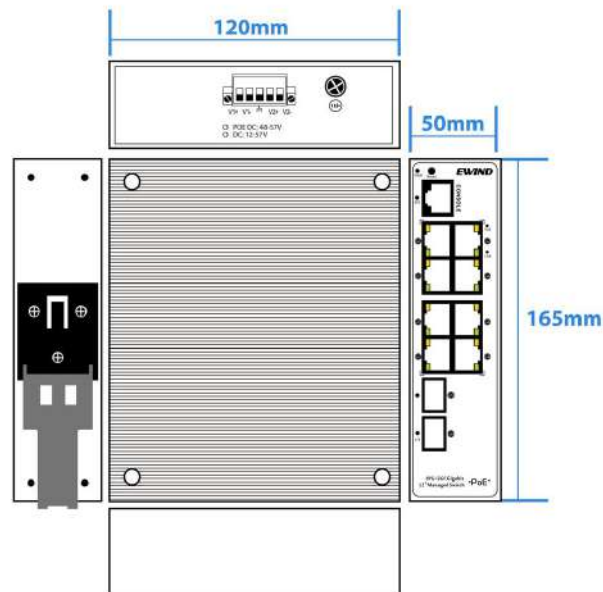
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## Technical Specifications;

Model	<b>DES-42S2MG-IND</b>
	Support against DoS attacks Support port broadcast message suppression Support host data backup mechanism Binding capabilities of IP+MAC+VLAN+ ports Dynamic Arp Inspection IP Source Guard ARP Snooping /snoofing Access control list
Remote Management	Shall support remote management through SNMP traps
DHCP	Support DHCP Client Support DHCP Snooping Support DHCP Serve Support DHCP Relay
Industrial Rating	IP40 and NEMA TS-2
Management and Maintenance	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 Support NTP clock 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 OS X) installed on every computer in the network

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## DIMENSIONS:



## APPLICATIONS:



## PACKING LIST

CONTENT	QTY	UNIT
10 Ports Full Gigabit Managed Industrial PoE Switch (DES- 42S2MG- IND )	1	SET
User Guide	1	PC
Warranty Card	1	PC