



**6-Port Industrial Gigabit Managed Layer 2 PoE+ Switch**


**ST-IND0402MPS Datasheet**

## Product Description

ST-IND0402MPS is a 6-Port Industrial Gigabit managed L2 PoE+ switch that provides 4 Gigabit RJ45 ports and 2 Gigabit SFP slots. It adopts fanless heat dissipation circuit and redundant power circuit design, supports EMC industry level 4 protection performance, with corrugated high-strength IP40 aluminum shell, low power consumption, Din-rail installation, -40°C-75°C Working temperature, it can performance well in harsh environment.

ST-IND0402MPS can also support full Layer 2 network management functions: ERPS, RSTP, VLAN, QoS, SNMPv1/v2c/v3, IEEE802.1X, SSH/SSL, port mirroring, port aggregation, etc. Full redundancy, switching and safety management features make it a reliable solution for intelligent transportation, video surveillance and other harsh industrial environments.

## Product Appearance

	ST-IND0402MPS	<ul style="list-style-type: none"> <li>• Input voltage: DC: 48-56V</li> <li>• Working temperature: -40°C ~ +75°C</li> <li>• Shell: IP40 protection level, fanless design</li> <li>• Static electricity: 8KV-15KV</li> <li>• MTBF: 100000 hours</li> </ul>
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## Hardware Parameters

Model	ST-IND0402MPS
Port description	4 x electrical port (PoE+) 1000BASE-T 2 x optical port (SFP) 1000BASE-X
Optical port characteristics	Interface type: SFP Speed: 1000Mbps Wavelength: Single-mode fiber: 1310nm/1550nm Multimode fiber: 850nm Core standard: Single mode: 8.3μm, 8.7μm, 9μm, 10μm Multimode: 50μm, 62.5μm, 100μm
Electrical port characteristics	Interface type: PoE+ Rate: 10/100/1000Mbps adaptive Duplex mode: full/half duplex Connection mode: MDI/MDIX automatic flip
Protocol standard	IEEE802.3i 10 BASE-T IEEE802.3u 100 BASE-TX IEEE802.3ab 1000 BASE-T IEEE802.3z 1000 BASE-LX IEEE802.3af Power over Ethernet IEEE802.3at Power over Ethernet IEEE802.3x Flow Control IEEE802.3az EEE

Exchange performance	<p>Backplane bandwidth: 12Gbps</p> <p>Packet forwarding rate: 8.92Mpps</p> <p>MAC address: 8K</p> <p>Packet buffer: 2Mbit</p> <p>Forwarding mode: Store and forward</p>
Power supply	<p>Input power: DC 48~56V (6PIN Phoenix terminal), 1*DC interface</p> <p>Power consumption: full load &lt;6W (not including PoE)</p> <p>Dual power supply: support</p> <p>Redundant protection: support</p> <p>Reverse connection protection: support</p>
Mechanical structure	<p>Shell material: metal</p> <p>Protection level: IP40</p> <p>Size: 153*130*44mm (Excluding connector protruding part and DIN rail assembly size)</p> <p>Weight: 1.05Kg</p> <p>Installation method: DIN Rail installation</p>
Surroundings	<p>Working temperature: -40°C~75°C</p> <p>Storage temperature: -40°C~85°C</p> <p>Relative humidity: 5%~95% RH (non-condensing)</p>
Industry Standard	<p>EMI: CE/FCC</p> <p>EMS: IEC61000-4-2 (ESD-static)</p> <p>IEC61000-4-3 (RS-radiation anti-interference)</p> <p>IEC61000-4-4 (EFT-fast burst)</p> <p>IEC61000-4-5 (Surge-lightning protection)</p> <p>IEC61000-4-6 (CS-conducted anti-interference)</p> <p>Machinery: IEC60068-2-6 (vibration)</p> <p>IEC60068-2-27 (Shock)</p> <p>IEC60068-2-32 (free fall)</p> <p>Industry: IEC61000-6-2</p> <p>Railway: EN50155, EN50121-4</p> <p>Transportation: NEMA TS-2</p>
Warranty	Warranty period: 3 years

## Software Specifications

Hardware watchdog	Stand by
PoE management	<p>Support PoE total power settings</p> <p>Support single port PoE power settings</p> <p>Support port PoE power supply priority design</p> <p>Support custom PoE power supply time</p>

Loop protection	<p>Support ERPS Ring protection</p> <p>Support 50ms healing looping</p> <p>Support BPDU protection, root protection and loopback protection</p>
Link aggregation	<p>Support link aggregation (LACP)</p> <p>Support static polymerization, dynamic aggregation</p> <p>Support for maximum support for 8 aggregation groups</p> <p>Support for source port, source MAC, destination MAC, source IP, destination IP, source IP port, destination IP port</p>
Summing tree (STP)	<p>Support STP (IEEE 802.1d),</p> <p>Support RSTP (IEEE 802.1w)</p> <p>Support edge port</p> <p>Support spanning tree BPDU packet statistics</p> <p>Support root bridge protection, TC protection, BPDU protection, BPDU filtering</p>
DHCP	<p>Support DHCP server</p> <p>Support DHCP Snooping</p> <p>Support Option82</p>
VLAN	<p>Support 802.1q VLAN</p> <p>Maximum support 4094</p> <p>Support QinQ</p> <p>Support Mac VLAN</p> <p>Support GVRP protocol</p> <p>Support GMRP protocol</p> <p>Support 1: 1 and N: 1 VLAN mapping function</p> <p>Support three port modes: Access, Trunk, and Hybrid, Translation, QinQ</p> <p>Including the foundation in QinQ and flexible in QinQ</p>
Security feature	<p>Based on user grading management and password protection</p> <p>Support for port numbers, IP addresses, MAC addresses limit users access</p> <p>Support HTTPS, SSH V1 / V2, SSL V1 / V2</p> <p>Support IP-Mac-Port-VLAN binding</p> <p>Support ARP protection, IP source protection, DOS protection</p> <p>Support DHCP Snooping, DHCP Attack Protection</p> <p>Support 802.1x certification,</p> <p>Support port security, port isolation</p> <p>Support port alarm</p>
Access Control (ACL)	<p>Supports L2 (Layer 2) ~ L4 (Layer 4) package filter function</p> <p>Support port mirror, port redirection, flow rate, QoS marking</p> <p>Support Mac ACL</p> <p>Support IP ACL</p>
Service quality (QoS)	<p>Support 8 port queues</p> <p>Support port priority, 802.1p priority, DSCP priority</p> <p>Support SP, WRR, WFQ priority scheduling algorithm</p>

Multicast	Support fast leaving mechanism Support static multicast group, dynamic multicast group Support IGMP Snooping Support multicast filtering, packet statistics, unknown multicast discard
Management and maintenance	Support Web network management (HTTP, HTTPS, SSL V3, TLS V1) Support CLI (Telnet, SSH V1 / V2, local serial port) Support SNMP V1 / V2 / V3, compatible public MIBS Support LLDP, RMON Support SNMP Support CPU monitoring, memory monitoring Support system log, hierarchical warning, support remote log server Support port alarm Support HTTP software upgrade, configuring backup import Support TFTP upgrade

## Installation Method

Before installation, confirm the operating environment of the equipment: power supply voltage, installation space, installation method, etc. Please carefully confirm the following installation requirements:

1. Check if there are cables and connectors required for installation
2. According to the reasonable configuration requirements, check whether the cable is in place (not more than 100m)
3. The product does not provide installation components, the user needs to prepare the components of the selected installation type: screws, nuts, tools, etc., to ensure reliable installation

Power requirements: 48-56V DC

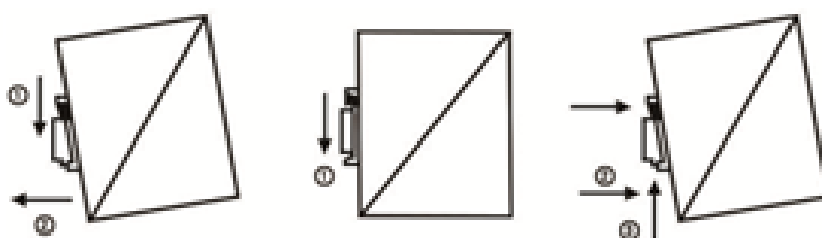
Environmental requirements

Working temperature: -40 ~ 75°C

Storage temperature: -40 ~ 75°C

Relative humidity: 5% ~ 95% (no condensation)

Rail installation



Note: All pictures are schematic diagrams, and the actual product is the main product

## Order Information

ST-IND0402MPS	4*10/100/1000M Self-adaptive PoE+ ports + 2*1000M SFP Slots
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