



## IES5028G-4GS-8GC

19-inch 1U Rack Mounting

28-port Full Gigabit Layer 2 Managed Industrial Ethernet Switch

- Support 4 Gigabit fiber ports (SFP slots), 8 Gigabit Combo (SFP slots or RJ45), 16 Gigabit copper ports
- Adopt SW-Ring patent technology, support single ring, coupling ring, chain ring, Dual-homing ring network function, automatic recovery time of network failure < 20ms
- Support rich network management functions: link aggregation, DDM, log function, diagnostic test, ERPS, ACL, GMRP
- Full Gigabit bandwidth can enable high performance and speed transmission of large amounts of video, voice, and data
- Support optional dual AC/DC power supply, input voltage: 100~240VAC/DC or 36~72VDC
- Support -40~75°C wide operating temperature range



Industrial Grade



Fanless Design



RPS

## Introduction

IES5028G-4GS-8GC is 28-port Gigabit layer 2 managed industrial Ethernet switch. It provides Gigabit copper ports, Gigabit fiber and copper Combo ports and Gigabit SFP slots. It adopts 1U rack mounting, abundant numbers of interfaces and Gigabit bandwidth to meet the application requirements of large-scale industrial network.

Network management system supports various network protocols and industrial standards, such as STP/RSTP/MSTP, 802.1Q VLAN, QoS, IGMP Static Multicast, LLDP, Port Trunking, Port Mirroring, etc. It also possesses complete management functions, including Port Configuration, Port Statistics, Access Control, 802.1X Authentication, Network Diagnosis, Rapid Configuration, Online Upgrading and so on, and supports CLI, WEB, Telnet, SNMP and other access methods. It can provide users with good experience with friendly design of network management system interface, simple and convenient operation.

This product supports optional dual AC/DC power supply. The input power supply is two independent power supply circuits which can ensure the normal operation of the device when one power supply fails. When power supply or port has link failure, ALARM indicator will be bright and send out alarm, meanwhile, alarm device connected to the relay will send out alarm for rapid scene troubleshooting. Hardware adopts fanless, low power consumption, wide temperature and voltage design and has passed rigorous industrial standard tests, which can suit for the industrial scene environment with harsh requirements for EMC. It can be widely used in smart grid, rail transit, smart city, safety city, new energy, aerospace, intelligent manufacturing, military project and other industrial fields.

## Features and Benefits

- ④ SNMPv1/v2c/v3 is used for network management of various levels
- ④ RMON can be used for efficient and flexible network monitoring
- ④ Support ERPS Ethernet protection technology, with high reliability and stability
- ④ Port mirroring can conduct data analysis and monitoring, which is convenient for online debugging
- ④ QoS supports real-time traffic classification and priority setting
- ④ LLDP can achieve automatic topology discovery, which is convenient for visual management
- ④ DHCP server and DHCP client could be used for allocating IP address of different strategies
- ④ File management is convenient for rapid configuration and online upgrade of the device
- ④ Log management records boot information, operation information and connection information
- ④ Bandwidth management and flow control can reasonably distribute network bandwidth, preventing unpredictable network status

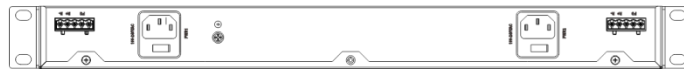
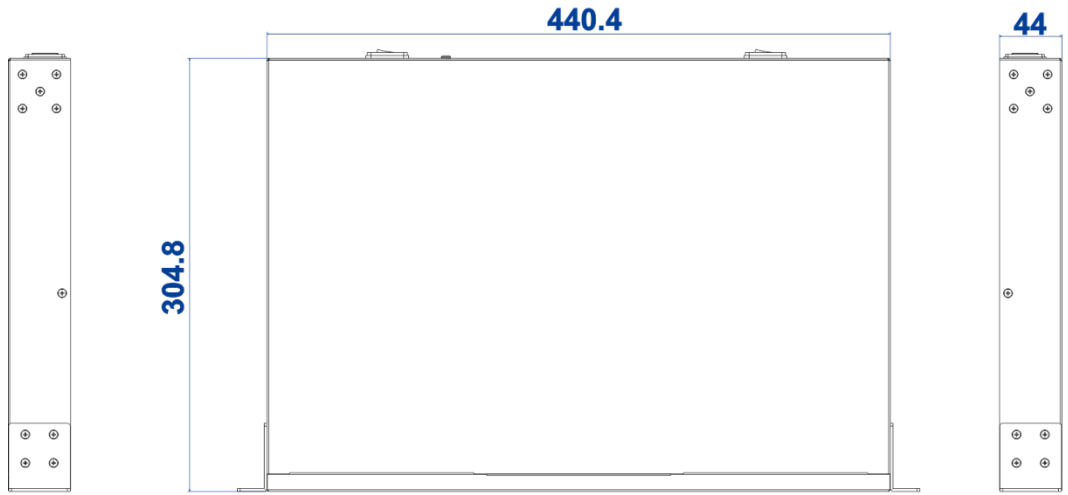
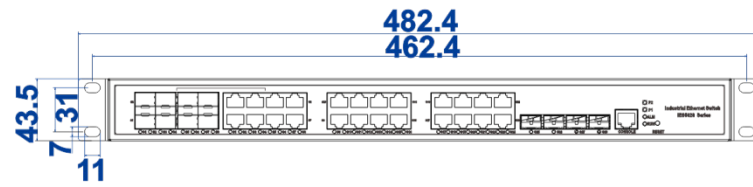
- ⦿ Port statistics can be used for the port real time traffic statistics
- ⦿ User password can conduct user hierarchical management to improve the device management security
- ⦿ ACL could strength the flexibility and security of network
- ⦿ Relay alarm is convenient for troubleshooting of construction site
- ⦿ Storm suppression can restrain the broadcast, unknown multicast and unknown unicast
- ⦿ SSHD configuration could encrypt transmitted data, prevent DNS and IP spoofing
- ⦿ TELNET configuration and HTTPS configuration could ensure the access security of data
- ⦿ VLAN is used for simplifying network planning
- ⦿ Port Trunking and LACP can increase network bandwidth and enhance the reliability of network connection to achieve optimum bandwidth utilization
- ⦿ IGMP Snooping, GMRP and static multicast can be used for filtering multicast traffic to save the network bandwidth
- ⦿ Bandwidth management and flow control can reasonably distribute network bandwidth, preventing unpredictable network status
- ⦿ Port isolation could achieve port isolation in the same VLAN and save Vlan resources
- ⦿ SW-Ring and STP/RSTP/MSTP can achieve network redundancy, preventing network storm
- ⦿ Ping, Traceroute, Port Loopback, VCT and DDM could achieve network diagnosis and troubleshooting

## Dimension

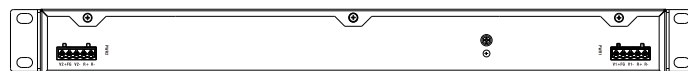
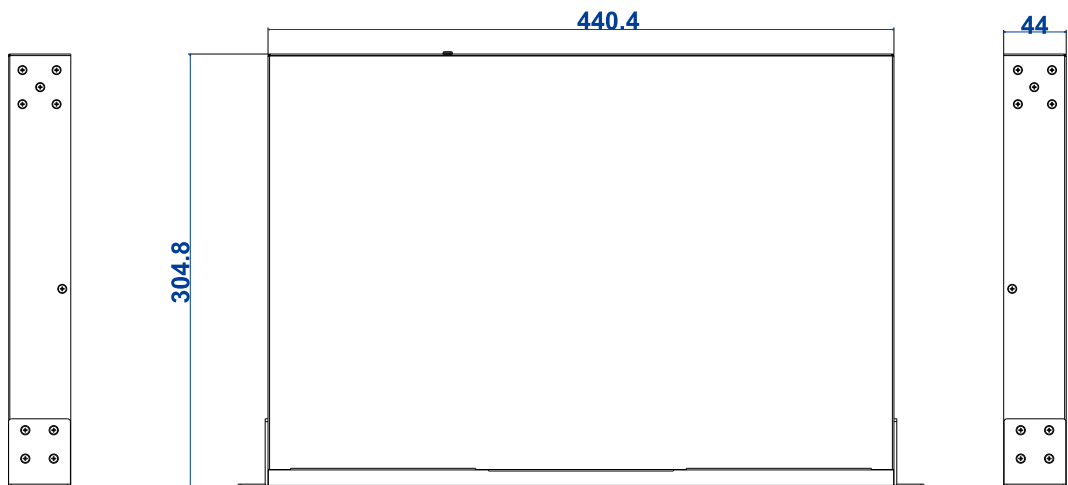
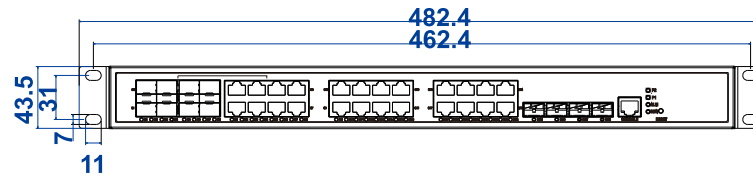
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Unit:mm

- AC Product



● DC Product



# Specification

Standard & Protocol	<p>IEEE 802.3 for 10Base-T                  IEEE 802.3u for 100Base-TX                  IEEE 802.3ab for 1000Base-T                  IEEE 802.3z for 1000Base-X                  IEEE 802.3x for Flow Control                  IEEE 802.1D for Spanning Tree Protocol                  IEEE 802.1w for Rapid Spanning Tree Protocol                  IEEE 802.1s for Multiple Spanning Tree Protocol                  IEEE 802.1Q for VLAN                  IEEE 802.1p for CoS                  IEEE 802.1X for 802.1X Authentication                  IEEE 802.1AB for LLDP                  IEEE 802.3ad for LACP</p>
Management	<p>SNMP v1/v2c/v3 Centralized Management of Equipment, RMON, Port Mirroring, QoS, LLDP, DHCP Server, DHCP Client, File Management, Log Management, Port Statistics</p>
Security	<p>Classification of User Permissions, Radius Server Authentication, ACL, 802.1X Authentication, Port Alarm, Power Supply Alarm, Storm Suppression, SSHD Configuration, Telnet Configuration, HTTPS Configuration</p>
Switch Function	<p>802.1Q Vlan, Static/Dynamic Port Aggregation, Bandwidth Management, Flow Control, Port Isolation</p>
Unicast / Multicast	<p>Static Multicast, GMRP, IGMP-Snooping</p>
Redundancy Protocol	<p>SW-Ring, STP/RSTP/MSTP, ERPS</p>
Troubleshooting	<p>Ping, Traceroute, Port Loopback, VCT, DDM</p>
Time Management	<p>Sntp</p>
Interface	<p>Copper port: 10/100/1000Base-T(X), RJ45, Automatic Flow Control, Full/Half Duplex Mode Self-adaption, MDI/MDI-X Autotuning                  SFP slot: 1000Base-SFP                  Combo port: 10/100/1000Base-T(X) or 1000Base-SFP                  Console port: CLI command line management port (RS-232), RJ45                  Alarm port: 2-pin 5.08mm pitch terminal blocks, support 2 relay alarm outputs, current carrying capacity 5A@30VDC or 10A@125VAC</p>
LED Indicator	<p>Running Indicator, Port Indicator, Power Supply Indicator, Alarm Indicator</p>

<p><b>Switch Property</b></p>	<p>Transmission mode: store and forward                  MAC address: 16K                  Packet buffer size: 12Mbit                  Backplane bandwidth: 56G                  Switch time delay: &lt; 10μs</p>
<p><b>Power Requirement</b></p>	<p>AC power supply</p> <ul style="list-style-type: none"> <li>● 100~240VAC/DC</li> <li>● Support 2 AC power supply inputs</li> <li>● Support 5A overcurrent protection</li> <li>● Terminal block of AC power supply input: single-phase socket with rocker switch</li> </ul> <p>DC power supply</p> <ul style="list-style-type: none"> <li>● 36~72VDC</li> <li>● Support 2 DC power supply inputs</li> <li>● Support 3A overcurrent protection</li> <li>● Support anti-reverse connection</li> <li>● DC input terminal blocks: 6-pin 5.08mm pitch terminal blocks</li> </ul>
<p><b>Power Consumption</b></p>	<p>No-load: 10.5W@220VAC                  Full-load: 25.3W@220VAC</p>
<p><b>Environmental Limit</b></p>	<p>Operating temperature range: -40~75℃                  Storage temperature range: -40~85℃                  Relative humidity: 5% ~ 95% (no condensation)</p>
<p><b>Physical Characteristic</b></p>	<p>Housing: IP30 protection, high-intensity corrugated metal                  Installation: 19-inch 1U rack mounting                  Weight: 3940g                  Dimension (W x H x D): 440.4mm×44mm×304.8mm</p>
<p><b>Industrial Standard</b></p>	<p>IEC 61000-4-2 (ESD, electrostatic discharge), Level 3</p> <ul style="list-style-type: none"> <li>● Air discharge: ±8kV</li> <li>● Contact discharge: ±6kV</li> </ul> <p>IEC 61000-4-4 (EFT, electrical fast transient), Level 3</p> <ul style="list-style-type: none"> <li>● Power supply: ±2kV</li> <li>● Signal: ±1kV</li> </ul> <p>IEC 61000-4-5 (Surge), Level 3</p> <ul style="list-style-type: none"> <li>● Power supply: differential mode±1kV, common mode±2kV</li> <li>● Signal: differential mode±1kV, common mode±2kV</li> </ul> <p>Shock: IEC 60068-2-27</p>



Free fall: IEC 60068-2-32

Vibration: IEC 60068-2-6

Certification	CE, FCC, RoHS
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Warranty 5 years



## Ordering Information

Available Models	Gigabit SFP	Gigabit Combo	Gigabit Copper Port	Power Supply Range
IES5028G-4GS-8GC	4	8	16	100~240VAC/DC or 36-72VDC dual power supply



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