RP-IGS65168IX-4FR

16-P SFP(100/1G) + 8-SFP/TP combo + 4-SFP(1G/2.5G/10G) L3 Managed Industrial Ethernet Switch

RP-IGS65168IX-4F is a highly reliable Layer 3 managed industrial fiber switch designed for robust performance. Featuring 16-port 100/1000Base-X SFP, 8-port 1000Base Combo, and 4-port 10G Base-X SFP+, it excels in transferring large volumes of video, voice, and data across industrial networks. With support for G.8032 ERPS, MSTP/RSTP/STP redundancy technologies, and Layer 3 routing, it's ideal for large-scale industrial setups.

In addition to its impressive capabilities, the RP-IGS65168IX-4F is a cost-effective and user-friendly device. It offers essential industrial Ethernet networking features, including wide voltage input options, redundant power design (AC, DC, or AC/DC), and a rugged IP40 fan-less housing suitable for rack-mount installation. With a wide operating temperature range of -40°C to 80°C and high EMI/EMC capability, it's the top choice for harsh environments in industries like transportation, oil & gas, chemical, IP surveillance, and automation.

RP-IGS65168IX-4F stands out as the best solution for heavy industrial factories and critical applications. Its combination of reliability, performance, and environmental resilience makes it an indispensable component in industrial networks where dependable connectivity is essential for success.

Features

- 16*100/1000Base-X SFP, 8*1000Base Combo, 4*1G/2.5/10GGBase-X SFP+
- AC/DC redundant power supply with polarity reverse/over-voltage/over-current protection
- Support USB one key configuration and upgrading
- Layer 3 feature: Support dynamic and static routing
- Layer 2 features: VLAN; ERPS, STP/RSTP/MSTP; Link aggregation, IGMP snooping, port mirroring, QinQ, 802.1X, port isolation, RMON, NTP client, DHCP snooping/client, Ping/Tracert test, ACL, QoS and SFP DDM function
- Management and maintenance: IPv4 and IPv6 management; Support Web, SNMP, CLI, Telnet/SSH management method; Support user management, system log, configuration

upload/download through web interface, firmware upgrade via HTTP/TFTP/USB

- Support G.8032 ERPS protocol, recovery time ≤20ms
- Support 6KV surge protection and ESD: Air-15kV, Contact-8kV Protection
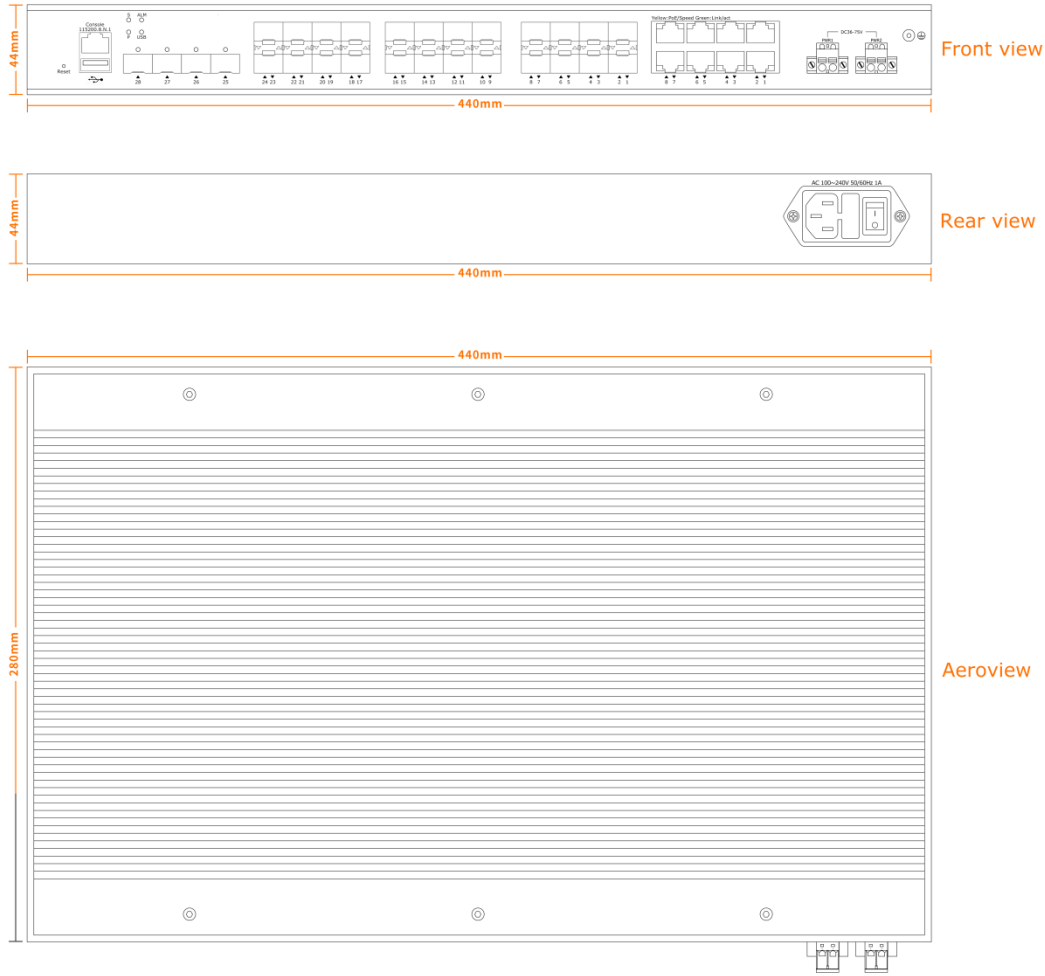
Specifications

Standards	- IEEE 802.3 10Base-T Ethernet - IEEE 802.3u 100Base-TX Ethernet - IEEE 802.3ab 1000Base-T Ethernet - IEEE 802.3z 1000Base-X Ethernet - IEEE 802.3ae 10Gb/s Ethernet - IEEE802.3x Flow Control and Back Pressure - IEEE 802.1D Spanning Tree Protocol - IEEE 802.1w Rapid Spanning Tree Protocol - IEEE 802.1Q VLAN - ITU-T G.8032 ERPS - IEEE 802.1X Port Authentication Network Control - IEEE 802.1ab LLDP - IEEE 802.3ad LACP
Interface	16 x 100/1000Base-X SFP 8 x COMBO SFP/RJ45 4 x 1G/2.5G/10GBase-X SFP+
Management port	- RJ45 Console port - USB 2.0
Switching capacity	128Gbps
Packet forwarding rate	190.4Mpps
MAC address table	16K
VLAN	4K
Buffer	12M bit
Forwarding delay	<5us
Jumbo Frame	Support 10Kbytes
MDX/MIDX	Support
Watchdog	Support
Layer 2 function	
Port aggregation	- Support GE port aggregation - Support 2.5GE aggregation - Support 10GE aggregation - Support static aggregation - Support dynamic aggregation
Port features	- Support IEEE802.3x flow control, - Support port traffic statistics,

	• Support port isolation • Support network storm suppression based on port bandwidth percentage
VLAN	• Support access mode • Support trunk mode • Support hybrid mode
VLAN Classification	• Mac Based VLAN • IP Based VLAN • Protocol Based VLAN
QinQ	• Port-based QinQ • VLAN-based QinQ • Flow-based QinQ
Port mirroring	• Many to one port mirroring
Ring network protocol	• Support STP、RSTP、MSTP • Support G.8032 ERPS protocol，single ring, sub Ring and associated sub ring • Recovery time ≤20ms
DHCP	• Support DHCP Client
Multicast	• IGMP V1, V2, V3 • IGMP snooping
ACL	• IP Standard ACL • MAC extend ACL • IP extend ACL
QoS	• Support QoS Class, Remarking • Support SP, WRR queue scheduling • Ingress Port-based Rate-limit • Egress Port-based Rate-limit • Support Policy-based QoS
Security	• Support Dot1x，port authentication，MAC authentication，RADIUS service • Support port-security • Support IP Source Guard，IP/Port/MAC binding • Support ARP-check and ARP packet filtering for illegal users • Support port isolation
Management and maintenance	• Support LLDP • Support user management and login authentication • Support SNMPV1/V2C/V3 • Support web management, HTTP1.1, HTTPS • Support Syslog and alarm grading • Support RMON (Remote Monitoring) alarm • Support NTP

	• Support temperature monitoring • Support Ping, TRACERT • Support optical transceiver DDM function • Support TFTP Client • Support Telnet Server • Support SSH Server • Support IPv6 Management • Support TFTP, web upgrading • Support USB upgrading • Support USB importing configuration
Layer 3 function	
ARP	• ARP table aging
IPv4/IPV6	• Static routing
ECMP	• ECMP; • Support the configuration of ECMP Max next-hop; • Support capacity balanced configuration;
Route policy	• IPv4 prefix-list
VRRP	• virtual router redundancy protocol
Routing Entry	• 13K
IP routing protocol	• RIPv1/v2; • OSPFv2; • BGP4; • BGP supports Routing recursive ECMP; • Support to view the number of neighbors and up/down state • IS-ISv4
Power parameter	
Input voltage	• 36-75VDC • 100~240VAC • Isolated redundant power input
Input current	• 1.2A DC/AC input Max
Total consumption	• Full loading ≤ 40W
Connector	• Removable 2-pin terminal block • AC socket
Reverse polarity protection	• Support
Over-voltage protection	• Support
Over-current protection	• Support
Mechanical structure	
LED Indicators	• P (Power indicator) • S (System status indicator) • USB (USB status indicator) • ALM (Fault status indicator) Red

	• 1-8 (Copper ports indicators) Green / Yellow • 9-28(Fiber ports indicators) Green
Case protection	• IP40
Installation method	• Rack mountable
Dimension	• 440 x 280 x 44mm (WxDxH)
Environment	• Operating temperature: -40°C~+80°C • Storage temperature -40°C~+85°C • Operating Humidity: 10 to 90% (Non-Condensing) • Storage humidity: 5%-95%RH
EMS	• Surge protection of power: IEC 61000-4-5 DC:6KV/6KV (8/20us), AC: 4K/2K • Surge protection of Ethernet ports: IEC 61000-4-5 6KV/2KV（10/700us） • RS：IEC 61000-4-3 80 MHz-1 GHz：10 V/m • EFT：IEC 61000-4-4 power 4K, signal 2K • CS：IEC 61000-4-6 10V • ESD：IEC 61000-4-2 Contact: 8K；Air: 15K
EMI	• FCC Part 15B Class A
Shock	• IEC 60068-2-27
Free fall	• IEC 60068-2-32
Vibration	• IEC 60068-2-6
Certification	• CE/FCC/RoHS

Dimension

Front view

Rear view

Aeroview

Ordering information

RP-IGS65168IX-4FR-2AC	16-P SFP(100/1G) + 8-SFP/TP combo + 4-SFP(1G/2.5G/10G) L3 Managed Industrial Ethernet Switch, Dual AC 100-240V 50/60Hz input
RP-IGS65168IX-4FR-AC/DC	16-P SFP(100/1G) + 8-SFP/TP combo + 4-SFP(1G/2.5G/10G) L3 Managed Industrial Ethernet Switch, AC 100-240V 50/60Hz and DC 36-75Vinput
RP-IGS65168IX-4FR-2DC	16-P SFP(100/1G) + 8-SFP/TP combo + 4-SFP(1G/2.5G/10G) L3 Managed Industrial Ethernet Switch, Dual DC 36-75V input