RP-IPG65168IX-4FR

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

RP-IPG65168IX-4FR is a dependable Layer 3 managed industrial PoE switch equipped with 16 ports for 10/100/1000Base-T PoE, 8 ports for 1000Base Combo, and 4 ports for 1G/2.5G/10GBase-X SFP+. It adheres to IEEE802.3af/at PoE standards, delivers total PoE power budget up to 370 watts. Featuring full gigabit downlink and 10G uplink capabilities, it ensures high-performance data transfer, making it ideal for efficiently handling extensive video, voice, and data traffic in networks. This switch also supports G.8032 ERPS, MSTP/RSTP/STP redundancy technologies, Layer 3 static and dynamic routing, robust Layer 2 management, and security functions, making it a perfect fit for large-scale industrial networks.

RP-IPG65168IX-4FR stands out as a cost-effective and user-friendly industrial Ethernet networking device. It offers essential features, including a wide voltage input range of 44-57VDC, redundant power design with DC/DC support, a rugged IP40 fan-less housing designed , and a wide operational temperature range of -40°C to 75°C. Additionally, it boasts high-level EMI/EMC capability, making it the optimal choice for challenging industrial environments. This switch is particularly well-suited for heavy industrial factories, transportation systems, and processing automation areas where harsh environmental conditions are a constant concern.

RP-IPG65168IX-4FR is a reliable and cost-effective industrial PoE switch designed for high-performance networking in challenging environments. Its robust features, versatile capabilities, and rugged design ensure it excels in various industrial applications where durability and network efficiency are critical.

Features

- 16*10/100/1000Base-T PoE, 8*1G Combo RJ45/SFP, 4*1G/2.5G/10GBase-X SFP+
- DC/DC redundant power supply with polarity reverse/over-voltage/over-current protection
- Complies with IEEE802.3af /at PoE+ standard
- Support USB one key configuration and upgrading
- Layer 3 feature: Support static routing and dynamic 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, PoE 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

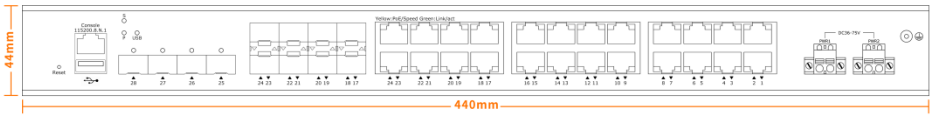
Standards	• IEEE 802.3 10Base-T Ethernet • IEEE 802.3u 100Base-TX Ethernet • IEEE 802.3ab 1000Base-T Ethernet • IEEE 802.3z 1000Base-X Ethernet • IEEE 802.3ae 10GBase-X Ethernet • IEEE802.3x Flow Control and Back Pressure • IEEE 802.1D Spanning Tree Protocol • IEEE 802.1w Rapid Spanning Tree Protocol • IEEE 802.1Q VLAN • ITU-T G.8032 ERPS • IEEE 802.1X Port Authentication Network Control • IEEE 802.1ab LLDP • IEEE 802.3ad LACP • IEEE 802.3af Power-Over-Ethernet • IEEE 802.3at Power Over Ethernet plus PSE
Interface	• 16 x 10/100/1000Base-T RJ45 PoE • 8 x 1G COMBO SFP/RJ45 • 4 x 1G/2.5G/10GBase-X SFP+
Management port	• 1 x RJ45 Console port • 1 x USB 2.0 for configuration and firmware update
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 • Support DHCP Snooping
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 & 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 PoE 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	• 44-57VDC, redundant power input
Input current	• 9A DC input Max
PoE power	• Full loading without PoE≤36W

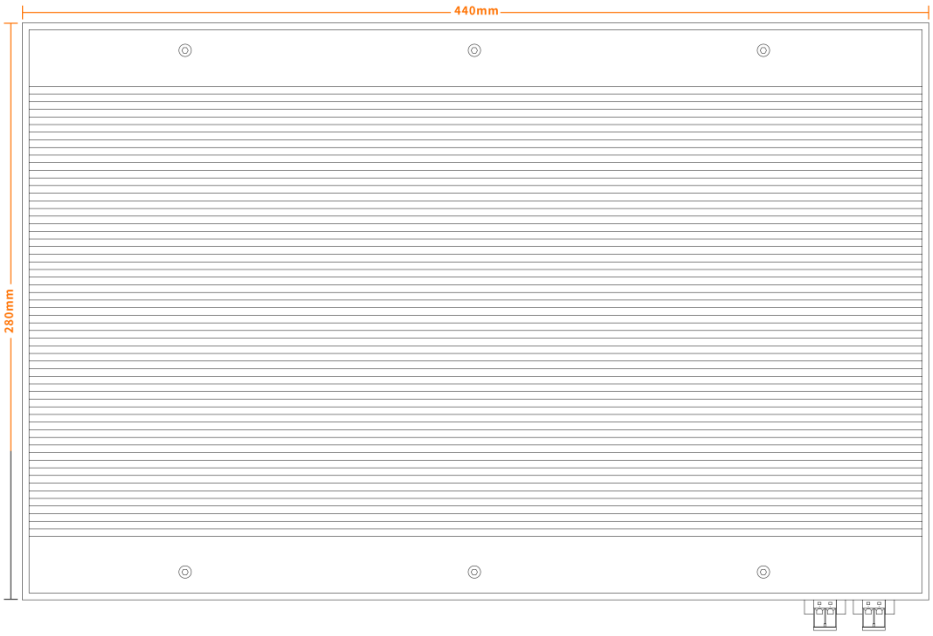
	• PoE power budget ≤ 370W
Connector	• Removable 2-pin terminal block
Reverse polarity protection	• Support
Over-voltage protection	• Support
Over-current protection	• Support
Mechanical structure	
LED Indicators	• P (Power indicator) • S (System status indicator) • USB (USB status indicator) Green • ALM (Fault status indicator) Red • 1-16 (Copper ports indicators) Green / (PoE) Yellow • 17-28 (Fiber ports indicators) Green
Case protection	• IP40
Installation method	• Rack mountable
Dimension	• 440x280x44mm (WxDxH)
Environment	• Operating temperature: -40°C~+75°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) • Surge protection of Ethernet ports: IEC 61000-4-5 6KV/6KV（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

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REPOTEC CO., LTD.
3F., No.258, Liancheng Rd., Zhonghe District., New Taipei City 235, Taiwan
TEL: 886-2-8227-1888 FAX: 886-2-8227-1818