The Advanced Networking Technology

www.repotec.com

RP-IPG6508IX-8F

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

RP-IPG6508IX-8F is the highly reliable managed industrial PoE switch with 8-port 10/100/1000-T RJ45, 4-port 100/1000Base-X SFP and 4-port 1G/2.5G/10GBase-X SFP+ slots. It delivers 30watts power per PoE port and



generates a total of 240Watts power to PD devices. With full gigabit downlink and 10G uplink capability, it delivers high-performance data transfer across industrial networks.

RP-IPG6508IX-8F supports ERPS redundant network and the self-recovery mechanism is less than 20ms on full load which allows you to scheme a reliable Ethernet network by building a redundant ring topology as your back-up solution. RP-IPG6508IX-8F also supports Layer 3 static routing & dynamic routing features, powerful Layer 2 management and secure function, which all making them ideal for large-scale industrial networks.

With IP40-rated rugged case protection allows for either DIN rail or wall mounting for efficient use of cabinet space. Its wide operating temperature ranges from -40°C to 75°C, RP-IPG6508IX-8F is the best choice for heavy industrial factory, transportation, oil & gas, chemical, IP Surveillance and processing automation area where environmental conditions are harsh and critical.

Features

- Redundant power 44-57V input with polarity reverse/over-voltage/over-current protection
- Support one digital output for relay alarm (terminal block Pin 5/6)
- Complies with IEEE802.3af PoE and IEEE802.3at PoE+ standard
- Layer 3 feature: Support static routing and dynamic routing
- Support Layer 2 management function: VLAN/VLAN Classification/QinQ/STP, RSTP, MSTP/Port Mirroring/DHCP/Multicast/ACL/IGMP/QoS/LLDP/802.1X/Dying Gasp/SFP DDM/IPV6 management/Web/SNMP/Telnet/TFTP/Web upgrading
- Support G.8032 ERPS protocol, recovery time ≤20ms
- Support 6KV surge protection and ESD: Air-15kV, Contact-8kV Protection
- IP40 fan-less and Din-rail hardware design
- Operation temperature: -40°C ~+75°C

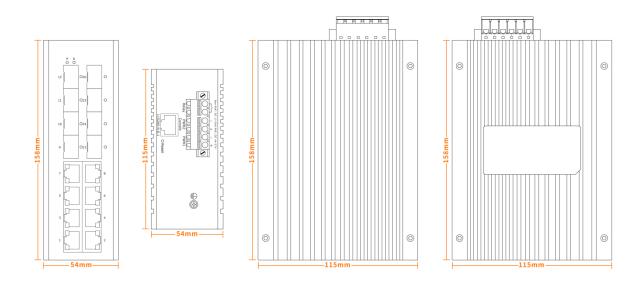
Specifications

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
	 IEEE 802.3af PoE; IEEE 802.3at PoE+
Interface	• 8 x 10/100/1000Base-T RJ45 PoE
	 4 x 100/1000Base-X SFP (13-16 ports)
	 4 x 1G/2.5G/10GBase-X SFP (9-12 ports)
Management port	 1 x RJ45 Console port
	 One digital output for relay alarm, alarm relay current carry
Alarm port	ability: 1A@24VDC
Switching capacity	• 104Gbps
Packet forwarding rate	• 154.7Mpps
MAC address table	• 16K
VLAN	• 4K
Buffer	• 12M bit
Forwarding delay	• <5us
Jumbo Frame	Support 10Kbytes
MDX/MIDX	• Support
Watchdog	Support
Layer 2 function	
	 Support GE port aggregation
	 Support 2.5GE aggregation
Port aggregation	 Support 10GE aggregation
	 Support static aggregation
	 Support dynamic aggregation
	Support IEEE802.3x flow control,
	 Support port traffic statistics,
Port features	Support port isolation
	 Support network storm suppression based on port
	bandwidth percentage
	Support access mode
VLAN	Support trunk mode
	Support hybrid mode
VLAN Classification	Mac Based VLAN

	IP Based VLAN
	 Protocol Based VLAN
	Port-based QinQ
QinQ	 VLAN-based QinQ
	 Flow-based QinQ
Port mirroring	 Many to one port mirroring
3	Support STP RSTP MSTP
	• Support G.8032 ERPS protocol , single ring, sub Ring and
Ring network protocol	associated sub ring
	 Recovery time ≤20ms
	Support DHCP Client
DHCP	Support DHCP Snooping
Multicast	IGMP snooping
	IP Standard ACL
ACL	MAC extend ACL
	IP extend ACL
	Support QoS Class, Remarking
	 Support SP, WRR queue scheduling
QoS	 Ingress Port-based Rate-limit
	 Egress Port-based Rate-limit
	 Support Policy-based QoS
	 Support Dot1x, port authentication, MAC authentication,
	RADIUS service
	Support port-security
Security	 Support IP Source Guard, IP/Port/MAC binding
	 Support ARP-check and ARP packet filtering for illegal
	users
	 Support port isolation
	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
Management & maintenance	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
Layer 3 function	
ARP	 ARP table aging

IPv4 / IPv6	Static routing
	• ECMP
ЕСМР	 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
	• RIPv1/v2;
	• OSPFv2;
IP routing protocol	• BGP4;
	BGP supports Routing recursive ECMP;
	 Support to view the number of neighbors and up/down
Power parameter	state
Power parameter Input voltage	 44-57VDC, redundant power input
Input current	 5.9A Max
	 Full loading without PoE≤20W
PoE power	 PoE power budget ≤ 240W
Connector	 Removable 6-pin terminal block, Pin 5-6 for relay alarm
Reverse polarity protection	Support
Over-voltage protection	Support
Over-current protection	Support
Mechanical structure	
	 P (Power indicator)
	P (Power indicator)S (System status indicator)
LED Indicators	 S (System status indicator) 1-8 (Copper ports indicators) Green / (PoE) Yellow
LED Indicators	 S (System status indicator) 1-8 (Copper ports indicators) Green / (PoE) Yellow 9-16 (Fiber ports indicators) Green
LED Indicators Case protection	 S (System status indicator) 1-8 (Copper ports indicators) Green / (PoE) Yellow 9-16 (Fiber ports indicators) Green IP40
LED Indicators Case protection Installation method	 S (System status indicator) 1-8 (Copper ports indicators) Green / (PoE) Yellow 9-16 (Fiber ports indicators) Green IP40 Din-rail
LED Indicators Case protection Installation method Dimension	 S (System status indicator) 1-8 (Copper ports indicators) Green / (PoE) Yellow 9-16 (Fiber ports indicators) Green IP40 Din-rail 54x158x115mm (WxHxD)
LED Indicators Case protection Installation method	 S (System status indicator) 1-8 (Copper ports indicators) Green / (PoE) Yellow 9-16 (Fiber ports indicators) Green IP40 Din-rail 54x158x115mm (WxHxD) Operating temperature: -40°C~+75°C
LED Indicators Case protection Installation method Dimension	 S (System status indicator) 1-8 (Copper ports indicators) Green / (PoE) Yellow 9-16 (Fiber ports indicators) Green IP40 Din-rail 54x158x115mm (WxHxD) Operating temperature: -40°C~+75°C Storage temperature -40°C~+85°C
LED Indicators Case protection Installation method Dimension	 S (System status indicator) 1-8 (Copper ports indicators) Green / (PoE) Yellow 9-16 (Fiber ports indicators) Green IP40 Din-rail 54x158x115mm (WxHxD) Operating temperature: -40°C~+75°C Storage temperature -40°C~+85°C Operating Humidity: 10 to 90% (Non-Condensing)
LED Indicators Case protection Installation method Dimension	 S (System status indicator) 1-8 (Copper ports indicators) Green / (PoE) Yellow 9-16 (Fiber ports indicators) Green IP40 Din-rail 54x158x115mm (WxHxD) Operating temperature: -40°C~+75°C Storage temperature -40°C~+85°C Operating Humidity: 10 to 90% (Non-Condensing) Surge protection of power: IEC 61000-4-5 DC:6KV/4KV
LED Indicators Case protection Installation method Dimension	 S (System status indicator) 1-8 (Copper ports indicators) Green / (PoE) Yellow 9-16 (Fiber ports indicators) Green IP40 Din-rail 54x158x115mm (WxHxD) Operating temperature: -40°C~+75°C Storage temperature -40°C~+85°C Operating Humidity: 10 to 90% (Non-Condensing) Surge protection of power: IEC 61000-4-5 DC:6KV/4KV (8/20us)
LED Indicators Case protection Installation method Dimension Environment	 S (System status indicator) 1-8 (Copper ports indicators) Green / (PoE) Yellow 9-16 (Fiber ports indicators) Green IP40 Din-rail 54x158x115mm (WxHxD) Operating temperature: -40°C~+75°C Storage temperature -40°C~+85°C Operating Humidity: 10 to 90% (Non-Condensing) Surge protection of power: IEC 61000-4-5 DC:6KV/4KV (8/20us) Surge protection of Ethernet ports: IEC 61000-4-5
LED Indicators Case protection Installation method Dimension	 S (System status indicator) 1-8 (Copper ports indicators) Green / (PoE) Yellow 9-16 (Fiber ports indicators) Green IP40 Din-rail 54x158x115mm (WxHxD) Operating temperature: -40°C~+75°C Storage temperature -40°C~+85°C Operating Humidity: 10 to 90% (Non-Condensing) Surge protection of power: IEC 61000-4-5 DC:6KV/4KV (8/20us)
LED Indicators Case protection Installation method Dimension Environment	 S (System status indicator) 1-8 (Copper ports indicators) Green / (PoE) Yellow 9-16 (Fiber ports indicators) Green IP40 Din-rail 54x158x115mm (WxHxD) Operating temperature: -40°C~+75°C Storage temperature -40°C~+85°C Operating Humidity: 10 to 90% (Non-Condensing) Surge protection of power: IEC 61000-4-5 DC:6KV/4KV (8/20us) Surge protection of Ethernet ports: IEC 61000-4-5 6KV/2KV (10/700us)
LED Indicators Case protection Installation method Dimension Environment	 S (System status indicator) 1-8 (Copper ports indicators) Green / (PoE) Yellow 9-16 (Fiber ports indicators) Green IP40 Din-rail 54x158x115mm (WxHxD) Operating temperature: -40°C~+75°C Storage temperature -40°C~+85°C Operating Humidity: 10 to 90% (Non-Condensing) Surge protection of power: IEC 61000-4-5 DC:6KV/4KV (8/20us) 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
LED Indicators Case protection Installation method Dimension Environment	 S (System status indicator) 1-8 (Copper ports indicators) Green / (PoE) Yellow 9-16 (Fiber ports indicators) Green IP40 Din-rail 54x158x115mm (WxHxD) Operating temperature: -40°C~+75°C Storage temperature -40°C~+85°C Operating Humidity: 10 to 90% (Non-Condensing) Surge protection of power: IEC 61000-4-5 DC:6KV/4KV (8/20us) 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
LED Indicators Case protection Installation method Dimension Environment	 S (System status indicator) 1-8 (Copper ports indicators) Green / (PoE) Yellow 9-16 (Fiber ports indicators) Green IP40 Din-rail 54x158x115mm (WxHxD) Operating temperature: -40°C~+75°C Storage temperature -40°C~+85°C Operating Humidity: 10 to 90% (Non-Condensing) Surge protection of power: IEC 61000-4-5 DC:6KV/4KV (8/20us) 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 61000-4-6 10V
LED Indicators Case protection Installation method Dimension Environment	 S (System status indicator) 1-8 (Copper ports indicators) Green / (PoE) Yellow 9-16 (Fiber ports indicators) Green IP40 Din-rail 54x158x115mm (WxHxD) Operating temperature: -40°C~+75°C Storage temperature -40°C~+85°C Operating Humidity: 10 to 90% (Non-Condensing) Surge protection of power: IEC 61000-4-5 DC:6KV/4KV (8/20us) 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
LED Indicators Case protection Installation method Dimension Environment EMS EMS EMI Shock Free fall	 S (System status indicator) 1-8 (Copper ports indicators) Green / (PoE) Yellow 9-16 (Fiber ports indicators) Green IP40 Din-rail 54x158x115mm (WxHxD) Operating temperature: -40°C~+75°C Storage temperature -40°C~+85°C Operating Humidity: 10 to 90% (Non-Condensing) Surge protection of power: IEC 61000-4-5 DC:6KV/4KV (8/20us) 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 FCC Part 15B Class A IEC 60068-2-27 IEC 60068-2-32
LED Indicators Case protection Installation method Dimension Environment EMS EMI Shock	 S (System status indicator) 1-8 (Copper ports indicators) Green / (PoE) Yellow 9-16 (Fiber ports indicators) Green IP40 Din-rail 54x158x115mm (WxHxD) Operating temperature: -40°C~+75°C Storage temperature -40°C~+85°C Operating Humidity: 10 to 90% (Non-Condensing) Surge protection of power: IEC 61000-4-5 DC:6KV/4KV (8/20us) 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 FCC Part 15B Class A IEC 60068-2-27

Dimension



Ordering information

RP-IPG6508IX-8F 8-P Gigabit PoE + 4-SFP(100/1G) slot + 4-SFP(1G/2.5G/10G) slot L3 Managed Industrial PoE Switch