#### **RP-IPG6324I-4F**

24-P Gigabit + 4-SFP(1G/2.5G) slot L2+ Managed Industrial Ethernet Switch

The RP-IPG6324I-4F is a high-performance L2+ industrial PoE switch designed for mission-critical networks. Equipped with 24 Gigabit PoE ports and four 1G/2.5G SFP uplinks, it supports IEEE 802.3af/at up to 30W per port, delivering stable, high-bandwidth connectivity for video surveillance, voice, and data applications.



Engineered to enhance network reliability, it offers full Gigabit switching, G.8032 ERPS for fast ring recovery, and MSTP/RSTP/STP redundancy. With IPv4/IPv6 static routing and comprehensive Layer 2 management features, it provides advanced control, robust security, and scalable performance for large industrial deployments.

Built to withstand harsh conditions, it supports 44–57VDC input, redundant power design, and a rugged IP40 chassis. With wide -40°C to 70°C operation and strong EMI/EMC resistance, it is ideal for demanding environments such as factory automation, transportation systems, oil & gas, and surveillance.

## **Features**

- 24\*10/100/1000Base-T RJ45 PoE, 4\*1G/2.5G Base-X SFP
- DC/DC redundant dual power 44-57V supply with polarity reverse/over-voltage/over-current protection
- Complies with IEEE802.3af PoE and IEEE802.3at PoE+ standard
- Layer 3 features: Support IPv4/IPv6 static routing, DHCP server
- Support USB one key configuration and upgrading
- 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
- IP40 fan-less and rack-mount hardware design
- Operation temperature: -40 ~ +70°C

# **Specifications**

Standards	IEEE 802.3 10Base-T Ethernet
Standards	IEEE 802.3 10Base-1 Etnernet     IEEE 802.3u 100Base-TX Ethernet
	IEEE 802.3u 100Base-1X Ethernet     IEEE 802.3ab 1000Base-T Ethernet
	IEEE 802.3ab 1000Base-1 Ethernet     IEEE 802.3z 1000Base-X Ethernet
	IEEE802.3x Flow Control and Back Pressure    FEE 802.4D Chambing Tree Breteed
	IEEE 802.1D Spanning Tree Protocol  IEEE 802.4 Paris Commission Tree Paris Commission Tree Paris Commission Tree Paris Commission Tree Paris Commissi
	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 802.3ad LACP
	IEEE802.3af PoE
	IEEE802.3at PoE+
Interface	• 24 x 10/100/1000Base-T RJ45
	• 4 x 1G/2.5GBase-X SFP
Management port	1 x RJ45 Console port
	1 x USB 2.0 for configuration and firmware update
Switching capacity	68Gbps
Packet forwarding rate	• 101Mpps
MAC address table	• 16K
VLAN	• 4K
Buffer	• 12Mbit
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 static aggregation
	Support LACP dynamic aggregation
	Up to 64 aggregation groups and up to 8 ports per group
	Support IEEE802.3x flow control
	Support interface counters
Double Control	Support port isolation
Port features	Port mirroring (One-to-One, Many-to-One)
	Support loop detection(Port-based; VLAN-based)
	Support broadcast storm suppression (broadcast;

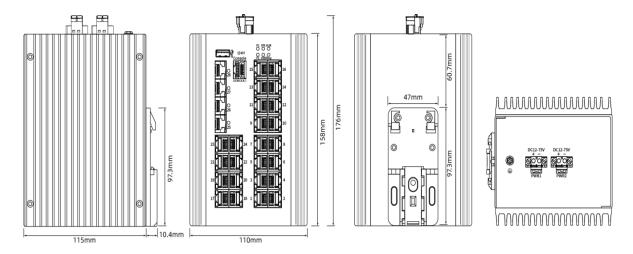
	unknown multicast; unknown unicast)
	<ul> <li>Support static Mac-address management</li> </ul>
Mac-address table	Support dynamic Mac-address Management
	Support filtering Mac-address
management	<ul> <li>Support MAC limit based on port and VLAN</li> </ul>
	<ul> <li>Support MAC flapping based on port and VLAN</li> </ul>
	Support access mode
VLAN	Support trunk mode
	Support hybrid mode
	Mac Based VLAN
VLAN classification	IP Based VLAN
	Protocol Based VLAN
	Normal mode
GVRP	Fixed mode
	Forbidden mode
	Port-based QinQ
QinQ	<ul> <li>VLAN-based QinQ(VLAN-stacking; VLAN-mapping)</li> </ul>
	Flow-based QinQ
LLDP	LLDP (Link Layer Discovery Protocol)
	Support IEEE802.1D-STP, IEEE802.1W-RSTP,
	IEEE802.1S-MSTP
Ring network protocol	Support G.8032 ERPS protocol <sup>,</sup> single ring, sub Ring
	and associated sub ring
	Recovery time ≤20ms
L2 Multicast	
IGMP snooping	Support IGMP snooping
Group address	Support group address
Security functions	
	IP Standard ACL
ACI	MAC extend ACL
ACL	IP extend ACL
	IPv6 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
	Port access control
802.1x	Mac-address access control
	RADIUS server
Port-security	Port-security

IP source guard	IP Port/MAC binding	
ARP-check	Support ARP-check and ARP packet filtering for illegal	
	users	
Access control	Support Telnet/SSH/HTTP/HTTPS user access control	
Management & Maintenance functions		
User Management	Support password protection	
	Support user authorization management	
SNMP	Supporting SNMP V1/V2C/V3 version	
	Web Management	
Web Management	Support HTTP V1.1	
	Support HTTPS	
CLI management	Console/Telnet command line management	
RMON	Support RMON(Remote Monitoring) alarm	
Firmware upgrade	Firmware upgrade	
	Ping/Tracer out	
Fault Detection	Dying gasp	
	Support optical transceiver DDM function	
Cable detection	Support copper port cable detection	
	<ul> <li>Support 802.3af/802.3at</li> </ul>	
	Support PD watchdog	
PoE management	Support PoE priority management	
1 or management	Support Max PoE power configuration for each port	
	Support alarm waterline configuration	
	Support reserved power configuration	
NTP	Network Time Protocol	
Syslog/Debug	Syslog/Debug	
Syologi Doxag	Syslog send to three servers	
Configuration import/export	Support FTP/TFTP remote import/export	
Comiguration importrexport	Support USB import/export	
Dual partition management	Support dual partition switching	
Application Protocol Function		
	DHCP snooping trust port	
DHCP Snooping	Support remote-id/circuit-id configuration	
	DHCP option-82	
DHCP client	Support DHCP client	
Telnet server	Support telnet server	
Telnet client	Support telnet client	
SSH server	Support SSH server	
TACACS	Support TACACS(the terminal access controller	
	accesses the control system)	
sflow	Support network traffic analysis	

TFTP	Support TFTP Client
Layer 3 functions	
ARP	ARP table aging
DHCP server	DHCP server
IPv4 / IPv6	static routing
Power parameter	
	• 44-57VDC(802.3af)
Input voltage	• 52-57VDC(802.3at)
	redundant power input
Input current	6A DC/DC input Max
	Full loading ≤ 26W
	<ul> <li>Single power input: PoE power budget ≤240W (-40°C~+</li> </ul>
Total consumption	70℃)
Total consumption	<ul> <li>Dual power input: PoE power budget ≤370W (-40°C~+</li> </ul>
	60℃)
	<ul> <li>*Dual power input must be the same DC voltage</li> </ul>
Connector	Removable 2x2-pin terminal block
Reverse polarity protection	Support
Over-voltage protection	Support
Over-current protection	Support
Manhautaal atmentum	
Mechanical structure	
Mechanical Structure	P1/P2 (Power indicator)
Mechanicai structure	<ul><li>P1/P2 (Power indicator)</li><li>SYS (System status indicator)</li></ul>
Mechanical Structure	,
	SYS (System status indicator)
LED Indicators	<ul> <li>SYS (System status indicator)</li> <li>USB (USB status indicator) Green</li> <li>ALM(Fault status indicator) Red</li> <li>Ring(Ring network indicator)</li> </ul>
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LED Indicators  Case protection	<ul> <li>SYS (System status indicator)</li> <li>USB (USB status indicator) Green</li> <li>ALM(Fault status indicator) Red</li> <li>Ring(Ring network indicator)</li> <li>1-24 (Copper ports indicators) Green</li> <li>1-24 (PoE status indicators) Yellow</li> <li>25-28 (Fiber ports indicators) Green</li> <li>IP40</li> </ul>
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	• 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

## **Dimension**



## **Ordering information**

24 x Gigabit + 4-SFP(1G/2.5G) L2+ Managed Industrial PoE Ethernet RP-IPG6324I-4F Switch (370W)

### **Brief Features**

PoE power 240W for Single power input
PoE power 370W for Dual power input
ERPS redundant network support
Self-recovery mechanism < 20ms
Layer 3 static routing support
Wide range voltage input, redundant power design
Digital output for relay alarm
Robust Layer 2 management functions
Surge and ESD protection