#### RP-IPG512-4F

# 8-P Gigabit + 4-SFP(100/1G) slot Industrial Managed 802.3at PoE Switch

RP-IPG512-4F is a Managed Gigabit Ethernet switch, providing 8 10/100/1000BaseT PoE PSE ports and 4 SFP ports. The PoE device helps realize a centralized power supply solution, and it provides up to30 watts of power per port. It meets the high reliability requirements demanded by industrial applications, such as factory assembly line, automation, transportation and heavy Industrial factory.



To create reliability in your network, RP-IPG512-4F equips with a proprietary redundant network protocol, which provides users with an easy way to establish an extra Ethernet network with ultra high-speed recovery time less than 20ms. RP-IPG512-4F supports many advanced network standards to optimize network performance, ease maintenance issues, and secure network safety . RP-IPG512-4F features remote management by SNMP, and supports management functions, e.g. 802.1Q VLAN, 802.1x access control , IGMP v1/v2, proxy & snooping , QoS functions ... etc. Auto-MDIX function is supported for every TX port of the switch for easy cable connection.

The switch with IP-30 standard metal case allows for either DIN rail or wall mounting for efficient use of cabinet space.

### **Features**

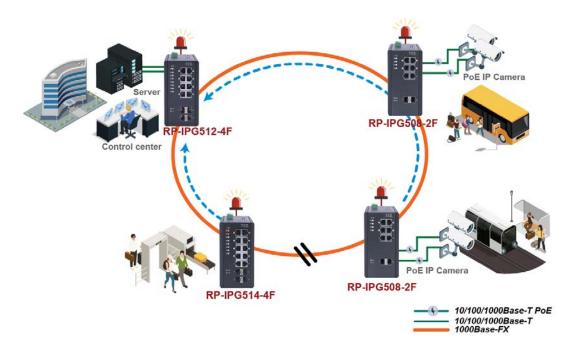
- Provide 8 10/100/1000 Base TX PoE ports plus 4 100FX/1000BaseF SFP slots
- IEEE 802.3af 15.4W / IEEE 802.3at 30W High Power PoE, total PoE power budget: 240W
- 9K Jumbo frames
- 8K MAC forwarding addresses
- L2 wire-speed switching engine
- Network redundant LACP, Spanning tree STP, RSTP & MSTP, and quick Ring fail-over protection (< 20 ms)
- Port-based /tag-based VLAN, IEEE 802.1ad/ QinQ VLAN, Add/remove VLAN tags,
- Multicasting support IGMP v1/v2, proxy & snooping
- Multicast/Broadcast/Flooding Storm Control
- IEEE802.1x access control
- Per VLAN mirroring
- CLI/Web/SNMP management interfaces
- PoE PSE power management & PD power consumption
- Dual power input & Reverse power protection
- DIN-Rail and Wall mounting option

# **Specifications**

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Standards	<ul><li>IEEE 802.3 10Base-T Ethernet</li><li>IEEE 802.3u 100Base-TX Fast Ethernet</li></ul>
	IEEE 802.3u 100Base-1X Fast Ethernet     IEEE 802.3ab 1000Base-T Gigabit Ethernet
	1555 000 0 4000D
	IEEE 802.3z 1000Base-X Gigabit Ethernet     IEEE802.3x Flow Control and Back Pressure
	8 x 10/100/1000 Mbps RJ45 Ports
Interface	<ul> <li>4 x 100/1000 Mbps R343 Folts</li> <li>4 x 100/1000Base SFP slots</li> </ul>
	Store and forward, L2 wire-speed/non-blocking switching
Operating mode	engine
MAC addresses	• 8K
Jumbo frames	9K Bytes
	Support straight or cross wired cables
1	10/100/1000 Mbps speed auto-negotiation; Full and half
RJ45 Ports	duplex
	1500 VRMS 1 minute Ethernet isolation
	Support 100FX SFP transceiver
	Support 100/1000BaseT SFP transceiver
SFP (pluggable) Ports	LC typically for fiber (depends on module)
	<ul> <li>Typical 50 or 62.5/125 μm for multimode (mm);</li> </ul>
	Typical 8 or 9/125 μm for single mode (sm)
Fast failover protection rings	<ul> <li>Link loss recovery &lt; 20ms</li> </ul>
	Single & Multiple rings supported
Spanning Tree Protocol	IEEE 802.1D STP, IEEE 802.1w RSTP, IEEE 802.1s MSTP
Port Trunk with LACP	Static trunk or Dynamic via LACP (Link Aggregation Control
	Protocol)
Flow control	IEEE 802.3x (Full Duplex) and Back-Pressure(Half Duplex)
Max VLANs	• 256
VI AN Tomas	Port-based VLANs     FEE 803.40 to a housed VLANs
VLAN Types	IEEE 802.1Q tag-based VLANs     IEEE 803.1ad Double Tagging (O in O)
	IEEE 802.1ad Double Tagging (Q in Q)      IGMP v1 v2 with up to 255 multipast groups
	IGMP v1, v2 with up to 255 multicast groups     IGMP specified and guerying.
Multicast protocols	<ul><li>IGMP snooping and querying</li><li>Immediate leave and leave proxy</li></ul>
	<ul> <li>Immediate leave and leave proxy</li> <li>Throttling and filtering</li> </ul>
LLDP	IEEE 802.1ab Link layer Discovery Protocol (LLDP)
Priority	IEEE 802.1p QoS
Number of queues per port	• 8
Scheduling schemes	SPQ, WRR
Traffic Shaper	port-based shaping
	IP and MAC-based access control
Port security	IEEE 802.1X authentication Network Access Control
Storm Control	Multicast/Broadcast/Flooding Storm Control
	Cisco-like CLI (command line interface)
Ham Manager and the second	WEB-based Management
User Management interfaces	SNMP v1, v2c
	Telnet (5 sessions)
Management Committee	HTTPs, SSH
Management Security	Radius Client for Management
Ungrado 9 Bostoro	FTP for Configuration Import/Export,
Upgrade & Restore	FTP for Firmware Upgrade

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Diagnostic	• Syslog
	Per VLAN mirroring
	Ethernet Copper connection diagnostic tool
	SFP with DDM (Digital Diagnostic Monitoring)
MIBs	<ul> <li>RFC 1757 RMON 1,2,3,9; RFC 2674 Q-Bridge MIB</li> </ul>
	RFC-1213 MIB-II; RFC-1493 Bridge MIB; RFC 2233 IF MIB
DHCP	<ul> <li>Client, Server, Relay, Snooping, Option 82</li> </ul>
NTP/SNTP	• Yes
System status	<ul> <li>Device info/status; Ethernet port status; PoE status</li> </ul>
PoE management	<ul> <li>Scheduling; power control; PoE PD power consumption</li> </ul>
Power input	Redundant Input Terminals
Power supply	• 48-56 VDC
Total PoE output power budget	• 240W
PoE PSE port output power	Cohoduling power control DoC DD power consumption
management	Scheduling; power control; PoE PD power consumption
Reverse power protection	• Yes
Transient protection	<ul> <li>&gt; 15,000 watts peak</li> </ul>
Power consumption	<ul> <li>15W @48 VDC full load, without PoE</li> </ul>
	Power input status
Indicators	Link & Speed
	PoE Power applying
Housing	IP30 Protection
Installation mounting	DIN Rail mounting and Wall Mounting
	<ul> <li>Operating temperature: -40 to +75°C (cold startup at -40°C)</li> </ul>
Environment	<ul> <li>Storage temperature: -40 to +85 °C</li> </ul>
	Humidity: 5 to 95% RH (non-condensing)
Dimension	• 77 x 154 x 128mm (LxWxD)
Vibration, shock & freefall	• IEC68-2-6, -27, -32
Certification compliance	CE/FCC/UL-508
Electrical safety	• CSA C22, EN61010-1, CE
EMC	• FCC Part 15, CISPR 22 (EN55022) Class A
EIVIC	IEC61000-4-2, -3, -4, -5, -6

## **Application**



### **Ordering information**

**RP-IPG512-4F** 8-P Gigabit + 4-SFP(100/1G) slot Industrial Managed Switch, w/ 8-Port 802.3at PoE (240W)