RP-IPG510-2F

8-P Gigabit + 2-SFP(100/1G) slot Industrial Managed Switch with 4-P 802.3at PoE

RP-IPG510-2F is a 8 ports Managed Gigabit Ethernet switch, providing 4 10/100/1000BaseT PoE PSE ports and 2 SFP ports. The PoE device helps realize a centralized power supply solution, and it provides up to 30 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. RP-IPG510-2F equips with a proprietary redundant network protocol, which provides users with an easy way to establish an extremely reliable Gigabit Ethernet network with ultra high-speed recovery time which is less than 20ms.

RP-IPG510-2F features Web, SNMP v1/v2c/v3, Http, SSH and Telnet management interfaces that enable remote accessibility. It also features console interface for local management. Furthermore, RP-IPG510-2F supports powerful L2 switch management functions,e.g. 802.1Q VLAN, 802.1x access control , IGMP v1/v2/v3, proxy & snooping , QoS and Port Mirroring, etc.

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

Feature

- Provide 8 10/100/1000 Base TX PoE ports plus 2 100FX/1000BaseF SFP slots
- IEEE 802.3af 15.4W / IEEE 802.3at 30W High Power PoE, total PoE power budget: 120W
- 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/v3, 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
- Support SSL/RADIUS/TACACS for security
- Support DSCP for QoS

Specification

Standards	• IEEE 802.3 10Base-T Ethernet • IEEE 802.3u 100Base-TX Fast Ethernet • IEEE 802.3ab 1000Base-T Gigabit Ethernet • IEEE 802.3z 1000Base-X Gigabit Ethernet • IEEE802.3x Flow Control and Back Pressure
Interface	• 8 x 10/100/1000 Mbps RJ45 Ports, with 4 802.3at/af PSE port • 2 x 100/1000Base SFP slots
Operating mode	• Store and forward, L2 wire-speed/non-blocking switching engine
MAC addresses	• 8K
Jumbo frames	• 9K Bytes
RJ45 Ports	• Support straight or cross wired cables • 10/100/1000 Mbps speed auto-negotiation; Full and half duplex • 1500 VRMS 1 minute Ethernet isolation
SFP (pluggable) Ports	• Support 100FX SFP transceiver • Support 100/1000BaseT SFP transceiver • LC typically for fiber (depends on module) • Typical 50 or 62.5/125 μm for multimode (mm); Typical 8 or 9/125 μm for single mode (sm)
Fast failover protection rings	• Link loss recovery < 20ms • 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
VLAN Types	• Port-based VLANs • IEEE 802.1Q tag-based VLANs • IEEE 802.1ad Double Tagging (Q in Q)
Multicast protocols	• IGMP v1, v2, v3 with up to 255 multicast groups • IGMP snooping and querying • Immediate leave and leave proxy • Throttling and filtering
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
Port security	• IP and MAC-based access control • IEEE 802.1X authentication Network Access Control
Storm Control	• Multicast/Broadcast/Flooding Storm Control
User Management interfaces	• Cisco-like CLI (command line interface) • WEB-based Management • SNMP v1, v2c, v3 • Telnet (5 sessions)
Management Security	• HTTPs, SSH, SSL • Radius Client for Management • RADIUS/TACACS
Upgrade & Restore	• FTP for Configuration Import/Export,

	FTP for Firmware Upgrade
Diagnostic	• Syslog • Per VLAN mirroring • Ethernet Copper connection diagnostic tool • SFP with DDM (Digital Diagnostic Monitoring)
MIBs	• RFC 1757 RMON 1,2,3,9; RFC 2674 Q-Bridge MIB RFC-1213 MIB-II; RFC-1493 Bridge MIB; RFC 2233 IF MIB
DHCP	• Client, Server, Relay, Snooping, Option 82
NTP/SNTP	• Yes
System status	• Device info/status; Ethernet port status; PoE status
PoE management	• Scheduling; power control; PoE PD power consumption
Power input	• Redundant Input Terminals
Input voltage range	• 46-57 VDC
Total PoE output power budget	• 120W
PoE PSE port output power management	• Scheduling; power control; PoE PD power consumption
Reverse power protection	• Yes
Transient protection	• > 15,000 watts peak
Power consumption	• 15W without PD loading
Indicators	• Power input status • Link & Speed • PoE Power applying
Housing	• IP30 Protection
Installation mounting	• DIN Rail mounting and Wall Mounting
Environment	• Operating temperature: -40 to +75°C (cold startup at -40°C) • Storage temperature: -40 to +85 °C • Humidity: 5 to 95% RH (non-condensing)
Dimension	• 77 x 154 x 128mm (WxHxD)
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 IEC61000-4-2, -3, -4, -5, -6

Ordering information

RP-IPG510-2F	8-P Gigabit + 2-SFP(100/1G) slot Industrial Managed Switch, w/ 4-Port 802.3at PoE (120W)

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