

RPT-2012GH-4F-X4 | 12 Port Industrial L2 Gigabit PoE++ Switch



FEATURE HIGHLIGHTS

- 8-port 10/100/1000BASE-T Ethernet with 4*IEEE 802.3bt compliant PoE, 90W/port & 4*IEEE 802.3at compliant PoE, 30W/port
- 4*100/1000Base-X SFP slots
- Support HTTP, HTTPS, CLI Command, Telnet, SNMP, SSH
- Network Redundancy: G.8032 ERPSv2, STP, RSTP, MSTP
- Support RADIUS, TACACS+ authentication protocol
- Support QoS and LACP
- Supports VLAN, SNMP v1/v2c/v3, ACL, IP Source Guard for Ethernet security
- Redundant Power Inputs, 48-55VDC or 12-55VDC
- Operating Temperature -10°C ~ 65°C and optional Extended -40°C ~ 75°C

DESCRIPTION

The RPT-2012GH-4F-X4 series features 8 RJ-45 Gigabit ports, including 4x 30W PoE+ ports and 4x 90W PoE++ ports, as well as 4x 100/1000 FX SFP slots, designed for industrial applications. It is specifically designed to operate in industrial environments, including hazardous locations. The standard power input and operating temperature range from 48-55VDC and -10 to 65 degrees Celsius respectively. Additionally, users have the option to choose the wide power input range of 12-55VDC and the extended temperature version, which operates between -40 to 75 degrees Celsius.

The RPT-2012GH-4F-X4 series provides comprehensive network security and management capabilities. It supports features such as Multiusers account, IGMP, GVRP, VLAN, QoS, SNMP, RADIUS, TACACS+, Aggregation (Static, LACP), SSH, SSL, and IP source guard, allowing users to create a highly-secured network environment. It also supports the PoE ping alarm function, which enables users to remotely reboot malfunctioning powered devices. For power-saving purposes, the series supports PoE scheduling and PoE output limit functions, allowing users to set up PoE output duration and wattage, ensuring PD priority and enhancing network security.

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SPECIFICATIONS

Technology

Standards	IEEE 802.3 10Base-T Ethernet
	IEEE 802.3u 100Base-TX and 100Base-FX Fast Ethernet
	IEEE 802.3ab 1000Base-T Gigabit Ethernet
	IEEE 802.3z 1000Base-X Gigabit Fiber
	IEEE 802.3af/at Power over Ethernet
	IEEE 802.3bt compliant PoE, 90W/port
	IEEE 802.3x Flow Control
	IEEE 802.1d STP (Spanning Tree Protocol)
	IEEE 802.1w RSTP (Rapid Spanning Tree Protocol)
	IEEE 802.1s MSTP (Multiple Spanning Tree Protocol)
	ITU-T G.8032 / Y.1344 ERPS v1/v2(Ethernet Ring Protection Switch)
	IEEE 802.1Q Virtual Local Area Network (VLAN)
	IEEE 802.1p QoS/CoS Protocol for Traffic Prioritization
	IEEE 802.1X Network Authentication
IEEE 802.1AB Link Layer Discovery Protocol (LLDP)	
IEEE 802.3ad Link Aggregation (LACP)	

Processing Type Store and Forward

Flow Control IEEE 802.3x flow control, back pressure flow control

Network Management

Management	IPv4/IPv6, SNMP v1/v2c/v3, LLDP, LLDP-MED, HTTP, HTTPS, SSHv2 telnet, DHCP client, DHCPv6 client, DHCP server, Port Mirror, DNS client/proxy, IP based Access Filter, ICMPv6, syslog, Time Zone /Daylight Saving, NTP client, RMON, sFlow, Loop detection, Console Port, Power lost warning, relay trigger
Security	Port-based/Single/Multi 802.1X, ACL(Port/Rate Limiters/ACE), MAC-based Authentication, VLAN assignment, QoS Assignment, Private VLAN, Guest VLAN, RADIUS accounting, TACACS+, IP MAC binding, WEB/CLI authentication, Authorization (15 levels), Port Security Limit Control, ACLs for filtering/policing/port copy, IP source guard, ARP Inspection
L2 Switching	Port/MAC/Protocol/IP Subnet-based VLAN, GARP/GVRP, Loop Guard, Link Aggregation static/LACP, BPDU guard, Error disable recovery, IGMP snooping v2/v3, MLD snooping v1/v2, IGMP filtering, IPMC throttling / filtering leave proxy, DHCP snooping, G.8032 v1/v2, DHCP option82
L3 Switching	Static Routes
QoS	802.1p Queueing, Input priority mapping, Storm control for Unicast/Multicast/Broadcast, Port/Queue/ACL policer, Port egress shaper, Queue egress shaper, DiffServ (DSCP), Tag remarking, Scheduler mode

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Power Saving	ActiPHY, PerfectReach, IEEE 802.3az EEE power management
Network Redundancy	STP/RSTP/MSTP, port trunk with LACP, ERPS v1/v2(<50ms)
Configuration	Http, Https, Telnet, SSH, CLI, TFTP, SNMP v3
PoE	PoE/PoE+/bt PoE, Power Budget Protection, PoE Output Scheduling, PoE Alive Check and Persistent
System / Diagnostics	Dual Image Protection, PING, PING6
Switch Properties	
Back-Plane (Switching Fabric)	24Gbps
Priority Queues	8
Max. Number of VLANs	4095
VLAN ID Range	VID 1 to 4095
Memory Buffer	4Mbits
Jumbo Frame	9.6Kbytes
MAC Table Size	8K
IGMP Group	1024
Transfer Rate	14,880pps for Ethernet port
	148,800pps for Fast Ethernet port
	1,488,000pps for Gigabit Ethernet port
Interface	
RJ45 Ports	8*10/100/1000 BASE-T with 4*bt PoE-PSE (90W/Port) & 4*at PoE-PSE(30W/Port) Auto-Negotiation, Full/Half Duplex, Auto-MDI/MDI-X
PoE Pin Out	V-, V-, V+, V+, for pin 1, 2, 3, 6, V+, V+, V-, V-, for pin 4, 5, 7, 8 *Support Modes: Mode A, Mode B, and 4-Pair
DIP Switch	Control PoE function for bt PoE port
Fiber Port	4*100/1000Base-X SFP slots
Wavelength	Depends on SFP modules
LED Indicators	System: Power 1, Power 2, Master (M), Ring (R), Status, PoE Load (P/L)
	Ethernet ports: Speed/Link/Active
	PoE: On-connected to PD devices SFP: Link/Active
RS232 Serial Console	1*RS232 in RJ45 connector with console cable, baud rate 115,200bps,8,N,1
Relay Contact	24 VDC, 1A resistive
Network Cable	10Base-T: 2-pair UTP/STP Cat. 3, 4, 5 cable EIA/TIA-568 100-ohm (100m)
	100Base-TX: 2-pair UTP/STP Cat. 5 cable EIA/TIA-568 100-ohm (100m)
	1000Base-T: 4-pair UTP/STP Cat.5/5E cable; EIA/TIA-568 100-ohm (100m)
Optical Cable	Multi-mode cable - 50/125um or 62.5/125um,
	Single-mode cable - 9/125um or 10/125um

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Power Requirements

Input Voltage	RPT-2012GH-4F(-T)-X4: dual 48-55VDC redundant power * For IEEE802.3 bt application, power supply not less than 53V is recommended
Power Connection	RPT-2812GH-4F(-T)-X4: dual 12-55VDC redundant power 1 removable 6-contact terminal block
Overload Current Protection	Present (Slow-Blow Fuse)
Reverse Polarity Protection	Present
System Power Consumption	Max. 12.5W full loading
Max. PoE Power Budget	RPT-2012GH-4F(-T)-X4: 240W@48-55VDC RPT-2812GH-4F(-T)-X4: 90W@12VDC, 180W@24VDC, 240W@36-55VDC
PoE Power Output	30W max. per PoE port

Mechanical Characteristics

Housing	Metal, IP30 protection
Dimensions (W x H x D)	54 x 142 x 99 mm (2.13 x 5.6 x 3.9 inch)
Weight	RPT-2012GH-4F(-T)-X4: 1.080kg/shipping 1.382kg RPT-2812GH-4F(T)-X4: 1.146kg /Shipping: 1.45kg
Mounting	DIN-Rail Mounting, Wall Mounting

Environmental Limits

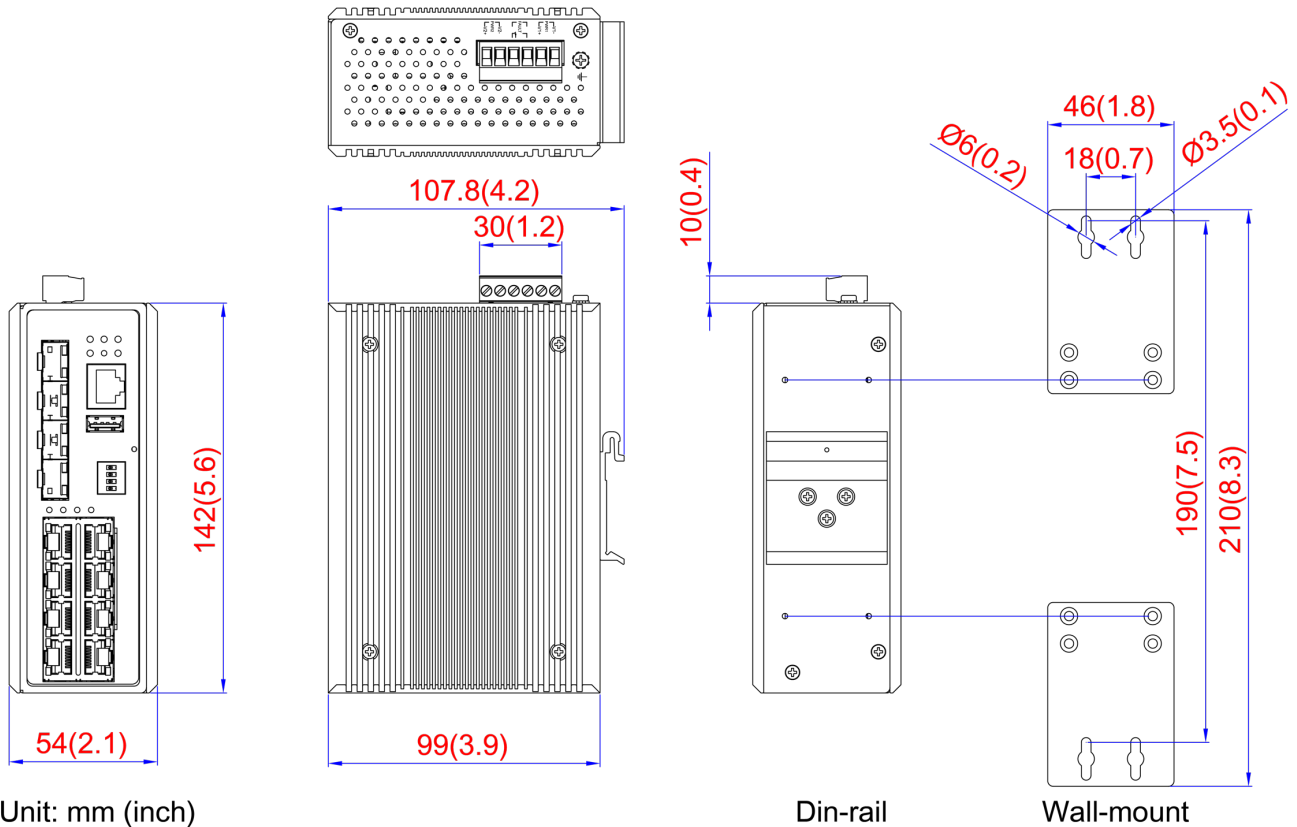
Operating Temperature	Standard: -10°C ~ 65°C; Extend: -40°C ~ 75°C
Storage Temperature	-40°C ~ 85°C (-40°C ~ 185°F)
Ambient Relative Humidity	5 to 95%, (non-condensing)

Regulatory Approvals

EMI	FCC Part 15 Subpart B Class A, CE EN55022/EN61000-6-4 Class A
EMS	CE EN55024/EN61000-6-2 Class A: IEC61000-4-2 (ESD), IEC61000-4-3 (RS), IEC61000-4-4 (EFT), IEC61000-4-5 (Surge), IEC61000-4-6 (CS), IEC61000-4-8 (Magnetic Field)
Free Fall	IEC60068-2-32
Shock	IEC60068-2-27
Vibration	IEC60068-2-6
Green	RoHS Compliant
Safety	UL61010-1, UL61010-2-201 (*Optional model, please contact Sbjlink sales)
Compliance	NEMA TS2 (ITS) (*Optional model, please contact Sbjlink sales)
MTBF (Telcordia SR-332, Issue 3, GB, 25°C)	RPT-2012GH-4F-X4: 342,877 hrs. RPT-2812GH-4F-X4: 332,002 hrs.

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DIMENSIONS



ORDERING INFORMATION

Model Name	10/100/1000 PoE	10/100/1000 bt PoE++	100/1000 SFP	Operating Temperature	PoE Max. Power Budget	Power input
RPT-2012GH-4F-X4	4 (30W/ea)	4 (90W/ea)	4	-10°C ~ 65°C	240W	48-55VDC
RPT-2012GH-4F-T-X4	4 (30W/ea)	4 (90W/ea)	4	-40°C ~ 75°C	240W	48-55VDC
RPT-2812GH-4F-X4	4 (30W/ea)	4 (90W/ea)	4	-10°C ~ 65°C	90W@12VDC, 180W@24VDC, 240W@48-55VDC	12-55VDC
RPT-2812GH-4F-T-X4	4 (30W/ea)	4 (90W/ea)	4	-40°C ~ 75°C	90W@12VDC, 180W@24VDC, 240W@48-55VDC	12-55VDC