

# RPT-2012P-2G2F-X4 | Industrial 12 Ports Managed PoE Switch



## FEATURE HIGHLIGHTS

- 8-port 10/100Base-T(X) Ethernet with IEEE 802.3af/at compliant PoE, 30W/port
- 2-port 10/100/1000Base-T(X) Gigabit Ethernet
- 2-port dual rate 100/1000Base-(F)X SFP slots
- Redundancy: G.8032 ERPS v2/ STP/ RSTP/ MSTP
- IP route for routing function
- RADIUS, TACACS+ authentication protocol
- Security: SNMP v1/v2c/v3, ACL, IP source guard
- Redundant power inputs design

## DESCRIPTION

RPT-2012P-2G2F-X4 Series are 12-port full managed Ethernet switch, which provides 8\*10/100Base-T(X) with 8\*IEEE 802.3 af/at PoE compliant, 2\*10/100/1000Base-T(X) copper ports and 2\*100/1000 Base-(F)X SFP slots. RPT-2012P-2G2F-X4 Series supports power inputs redundancy and standardized network redundancy ITU-T G.8032 ERPS v2 (Ethernet Ring Protection Switch) protocol, providing <50ms recovery time to the network.

The 8-Port PoE has 30W per port output. The PoE ping alarm function that allows user to reboot the powered device remotely when it suffers from a malfunction. For power saving, PD priority settings and security, RPT-2012P-2G2F-X4 Series also supports PoE scheduling and PoE output limit function to set up PoE output duration and watt for your application.

RPT-2012P-2G2F-X4 Series provides comprehensive network security and management capability by supporting Multiusers account, IGMP, GVRP, VLAN, QoS, SNMP, RADIUS, TACACS+, Aggregation(Static, LACP), SSH, SSL, IP source guard to create a highly-secured network environment.

RPT-2012P-2G2F-X4 is designed to withstand harsh and extreme environment conditions. With fanless design, RPT-2012P-2G2F-X4 supports extremely temperature from -40 to 75 degree C.

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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 802.3x Flow Control
	IEEE 802.3af/at Power over Ethernet
	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, USB configuration backup/restore, 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
L3 Switching	DHCP option82, IP route
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
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
System / Diagnostics	Dual Image Protection, PING, PING6
PoE	PoE/PoE+ power allocation, power budget protection, scheduling, alive check, remote reboot PD device

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## SPECIFICATIONS

### Switch Properties

Switching Fabric (Back-Plane)	9.6Gbps
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*10/100Base-T(X) and 2*10/100/1000Base-T(X) Auto-Negotiation, Full/Half Duplex, Auto-MDI/MDI-X
PoE Pin Out	V+, V+, V-, V-, for pin 1, 2, 3, 6 (End-span, Mode A)
Fiber Port	2*100/1000Base-(F)X SFP slots
Wavelength	Depends on SFP modules
LED Indicators	System: Power 1, Power 2, Master, Ring, Fault
	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
Configuration Backup	1*USB 2.0 host (type-A) for configuration backup/restore
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

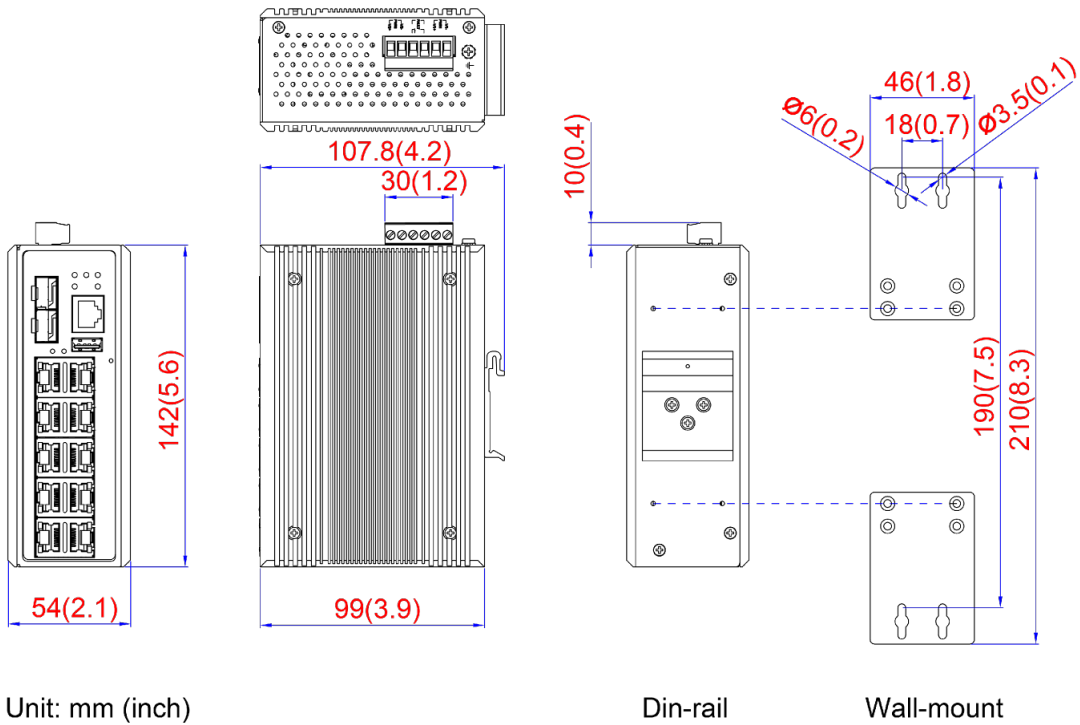
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## SPECIFICATIONS

Power Requirements	
Input Voltage	RPT-2012P-2G2F: 48-55VDC dual redundant power inputs RPT-2812P-2G2F: 12-55VDC dual redundant power inputs
Power Connection	1 removable 6-contact terminal block
Overload Current Protection	Present (Slow-Blow Fuse)
Reverse Polarity Protection	Present
System Power Consumption	Max. 15W full loading
Max. PoE Budget	RPT-2012P-2G2F: 240W at 48-55VDC
	RPT-2812P-2G2F: 90W at 12VDC; 180W at 24VDC; 240W at 48-55VDC
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 5.59 x 3.9 inch)
Weight	RPT-2012P-2G2F: Unit weight 0.89kg (1.97 lb) Shipping weight 1.25kg (2.76 lb)
	RPT-2812P-2G2F: Unit weight 0.94kg (2.07 lb) Shipping weight: 1.3kg (2.87 lb)
Mounting	DIN-Rail Mounting, Wall Mounting
Environmental Limits	
Operating Temperature	Standard: -10°C ~ 65°C (14°F ~ 149°F)
	Extend: -40°C ~ 75°C (-40°F ~ 167°F)
Storage Temperature	-40°C ~ 85°C (-40°F ~ 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)
	IEC60068-2-32
Free Fall	IEC60068-2-27
Shock	IEC60068-2-6
Vibration	RoHS Compliant
Green	UL61010-1, UL61010-2-201
Safety	NEMA TS2 (ITS) (apply by request)
Compliance	RPT-2012P-2G2F: 456,290 hrs. RPT-2812P-2G2F: 441,751 hrs.
MTBF (Telcordia SR-332, Issue 3, GB, 25°C)	

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## DIMENSION



## ORDERING INFORMATION

Model Name	Software	10/100 TX	10/100/1000TX	100/1000 FX	Operating Temperature	Power input
RPT-2012P-2G2F-X4	L2	8 PoE	2	2 SFP	-10°C ~ 65°C	48-55VDC redundant
RPT-2012P-2G2F-T-X4	L2	8 PoE	2	2 SFP	-40°C ~ 75°C	48-55VDC redundant
RPT-2812P-2G2F-X4	L2	8 PoE	2	2 SFP	-10°C ~ 65°C	12-55VDC redundant
RPT-2812P-2G2F-T-X4	L2	8 PoE	2	2 SFP	-40°C ~ 75°C	12-55VDC redundant