

RPT-2012X-4F-T-X1 | Industrial 12-Port Managed Gigabit Switch



Feature Highlights

- 4 10G Uplink SFP Ports
- 8 10/100/1000 BASE-T(X) RJ45 ports
- Redundancy such as ERPS, RSTP, STP, MRP (Client)
- IEEE 1588v2 Precision Time Protocol
- CE/FCC/UL, NEMA TS-2, DNV-GL Marine
- Operating Temperature from -40°C~70°C

DESCRIPTION

RPT-2012X Series is designed for high bandwidth and high reliability network industrial environments. It offers 4 10Giga uplinks to support full bandwidth and redundancy. The network redundant self-recovery mechanism is less than 20ms on full load that enables the user to build a reliable network through almost any redundant ring topology such as ITU-T G.8032 ERPS Ring, IEEE802.1D-2004 RSTP, STP, MSTP, MRP (Client), iA-Ring, iA-Chain and many compatible rings protocols. With a multifunctional web dashboard, its offers intelligent features such as Quality of service (QoS) per port or per VLAN, VLAN, IGMP, port mirroring and security. This series also add Power over Ethernet version as an option for surveillance application. IEEE1588v2 precision time protocol is hardware base E2E transparent clock. Moreover, UL, CE, FCC, NEMA TS-2, DNV GL Marine certified, RPT-2012X series is compliant to use in traffic control, marine and factory automation applications.

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SPECIFICATIONS

Switch Properties

Priority Queues	8
VLAN Table	4096
Mac Based VLAN	512
VLAN ID Range	VID 1 to 4094
Trunk Group	4
Static IGMP Groups	128
Dynamic IGMP Groups	256
MAC Table Size	16K
Packet Buffer Size	1.5MB
Jumbo Frame	9216 Byte

Ethernet

Standards	IEEE 802.3 for 10BaseT
	IEEE 802.3u for 100BaseT(X)
Protocols	IEEE 802.3ab for 1000BaseT(X)
	IEEE 802.3z for 1000BaseX
	IEEE 802.3ae For 10 Gigabit Ethernet Fiber
	IEEE 802.3x for Flow Control, back pressure flow control
	IEEE 802.1D-2004 for Spanning Tree Protocol
	IEEE 802.1w for Rapid Spanning Tree Protocol
	IEEE 802.1s for Multiple Spanning Tree Protocol
	IEEE 802.1Q for VLAN Tagging
	IEEE 802.1p for Class of Service IEEE 802.1X for Authentication
	IEEE 802.3ad for Port Trunk with LACP IEEE 802.3az for Energy Efficient Ethernet
Standards	IPv4, IPv6, IGMPv1/v2/v3, IGMP Snooping, GARP, GMRP, GVRP, SNMPv1/v2c/ v3, SNMP Inform, ICMP, Telnet, SSH, DHCP Relay/Client, BootP, TFTP, SMTP, SMTP (Gmail), RMON, HTTP, HTTPS, Syslog, MRP (Client), LLDP, 802.1x, EAP, RADIUS, TACACS+, Mirror port, QoS, ACL, ITU-T G.8032 ERPS Ring, STP
	RSTP, MSTP, Compatible Ring/Chain, U-Ring, NTP Server/Client, Serial Console, Modbus/TCP, IEEE 1588 PTP V1/V2, UDLD, Security, Trunk, LACP, MLD, 802.1Q VLAN, Port-Based VLAN, MAC-Based VLAN, IP-Subnet-Based VLAN, Protocol-Based VLAN, QnQ, 802.1x, ARP spoof Prevention, DHCP snooping, IP source Guard, Dynamic ARP Inspection, Profinet, DHCP relay Agent

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Ethernet		
Redundancy	ITU-T G.8032 ERPS Ring, STP, RSTP, MSTP, Compatible Ring/Chain, U-Ring	
Time Synchronization	Network Synchronization	NTP Server/Client, SNTP
	Precision Network Synchronization	IEEE1588v1 OC/BC (Software) IEEE1588v2 E2E TC (Hardware) - ns acc. IEEE1588v2 OC/BC (Software)
Automation Profiles	Modbus/TCP device status registers provided	
SNMP MIB	MIB II, IF-MIB, SNMPv2 MIB, BRIDGE-MIB, RMON MIB Group 1,2,3,9, RFC RFC 1157, RFC 1213, RFC 1215, RFC 1493, RFC 1643, RFC 1757, RFC 2011, RFC 2012, RFC 2013, RFC 2233, RFC 2571, RFC 2742, RFC 2819, RFC 2863, RFC 3411, RFC 3412, RFC 3413, RFC 3414, RFC 3415, RFC 2674	
Power		
Input Voltage	9-57 VDC	
Input Current (System)	Max. 2.2 A @ 12 VDC	
Power Consumption (System)	Max. 26.4 W @ 12 VDC	
Connector	5-Pin 5.08mm Lockable Terminal Block	
Reverse Polarity Protection	Yes	
Interfaces		
RJ45 Ports	8 10/100/1000BASE-T(X) auto negotiation speed	
Fiber Optics Ports	4 10G SFP slots	
LED Indicators	PWR1, PWR2, Alarm, Run, Ring, Ring Master, RJ-45 Link/Speed, SFP Link	
Console	RS232 (RJ45 connector)	
Relay Output	2 relay outputs with current carrying capacity of 1A @ 24 VDC	
DIP Switches	Ring Control and Profinet Setting	
Button	Reset Button	

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SPECIFICATIONS

Physical Characteristics

Housing	IP30 SPCC Metal housing, ruggedized Heat-sink
Dimension (W x H x D)	76 x 200 x 160 mm
Weight	2,500 g
Installation	DIN-Rail, Wall mount (optional kit)

Environmental Limits

Operating Temperature	-40°C~70°C (-40°F~158°F)
Storage Temperature	-40°C~85°C (-40°F~185°F)
Ambient Relative Humidity	5%~95%, 55°C (Non-condensing)

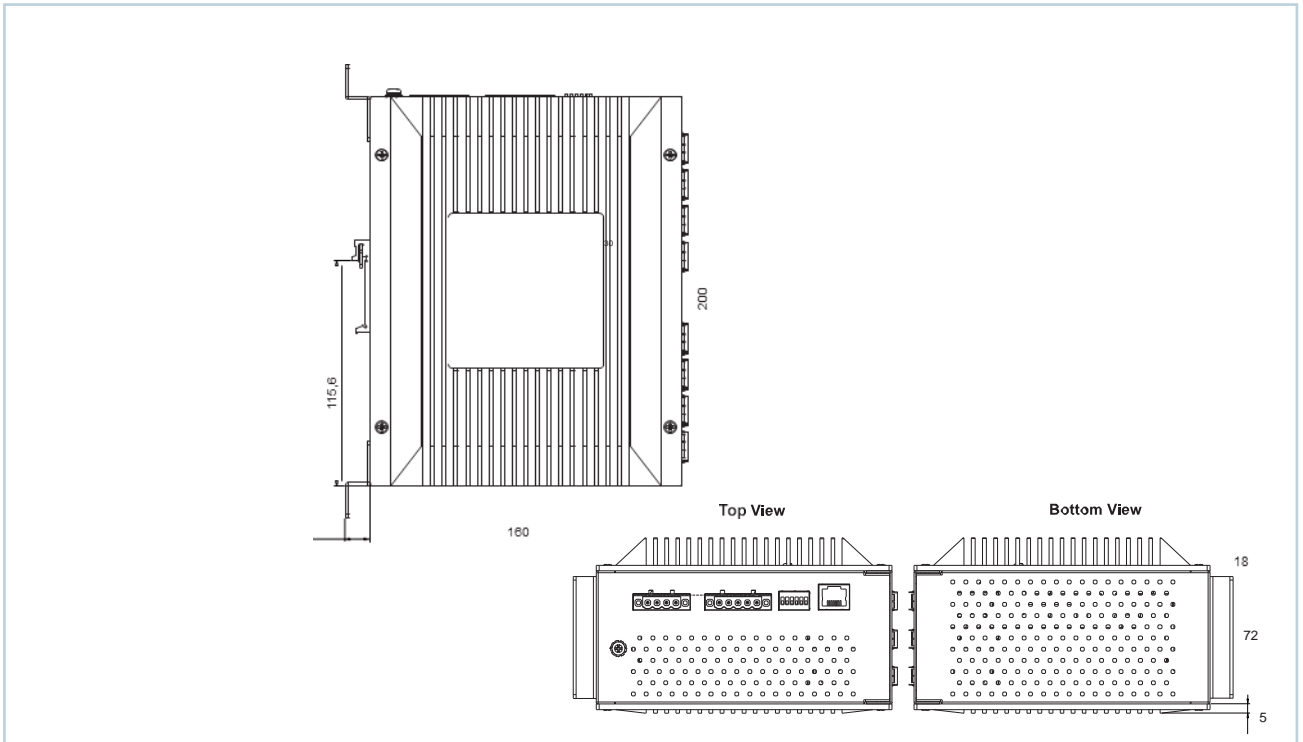
Regulatory Approvals

Safety	UL62368-1, 2nd Ed., CSAC22.2 N. 62368-1-14,NZS62368.1:2018,EN62368-1:2014+A11:2017
Traffic Control	NEMA TS-2
EMC	FCC Part 15, Subpart B, Class A EN 55032, EN 55024, EN 61000-3-2, EN 61000-3-3, EN 61000-6-2, EN 61000-6-4,
DNVGL Maritime	DNV-GL

Test	Item	Value	Level	
IEC 61000-4-2	ESD	Contact Discharge	±6KV	3
		Air Discharge	±8KV	3
IEC 61000-4-3	RS	80-1000MHz	10(V/m)	3
		1.4-2.0GHz	3(V/m)	3
		2.0-2.7GHz	10(V/m)	3
IEC 61000-4-4	EFT	AC Power Port	±2.0kV	3
		DC Power Port	±2.0kV	3
		Signal Port	±1.0kV	3
IEC 61000-4-5	Surge	DC Power Port	Line-to Line±1.0kV	3
		Signal Port	Line-to Earth±2.0kV	3
IEC 61000-4-6	CS	0.15-80MHz	10V rms	3
IEC 61000-4-8	PfMF	Enclosure	30 V/m	4
IEC 61000-4-11	DIP	AC Power Port	-	A
Shock	MIL-STD-810G Method 516.5			
Drop	MIL-STD-810F Method 516.5			
Vibration	MIL-STD-810F Method 514.5 C-1 & C-2			
RoHS II	Yes			
MTBF	20 Years			

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DIMENSIONS



Ordering information

Model name	10/100/1000 RJ45	10/100/1000 RJ45 (POE)	10G SFP
RPT-2012X-4F-T-X1	8		4
RPT-2012XP-4F-T-X1		8	4

Optional Accessories

Model name	Description
WMK-450-Black	Aluminum wall mount kit
CBL-RJ45(8P)-DB9(F)-90-C	RJ45 to DB9 Female Cross Over Console Cable, 90cm