



## FEATURE HIGHLIGHTS

- 6 X 10/100/1000 BASE-T(X) RJ45 ports
- 2 x 10/100/1000 BASE-T(X) RJ45 ports with MACsec encryption support
- 99% of throughput. No additional latency
- Plug-and-play LAN protection. Embedded MACsec Key Agreement make protection easy.
- IP30 aluminum din rail housing
- Prioritizes Profinet packets according to 802.1P
- Operation temperature between -20°C~70°C

## DESCRIPTION

Featuring 6 x Gigabit RJ45 ports and the choice between 2 x Secure Gigabit RJ45 ports or 2 x Secure Gigabit SFP uplink slots, Sbjlink's RPT- 2208G -X1 switch series provides a plug-and-play solution for fast, reliable network switching that offers increased network security through MACsec encryption.

Providing point-to-point security on Ethernet links between nodes, MACsec uses GCM-AES to ensure the integrity of all network traffic. This means it can secure a network from a whole host of security threats, including intrusion, man-in-the-middle, masquerading, passive wiretapping, and playback attacks. And because MACsec encryption is hardware-based, there is no added latency.

With its modern, slim, and flat design to minimize surface area usage, the RPT-2208G-X1 series is ideal for demanding industrial applications that require compact solutions while delivering high network performance. Supporting a wide operating temperature range of -20°C to 70°C and being compliant with essential sections of EN 60950, UL/IEC 60950, EN/IEC(CB)/UL62368-1, and MIL-STD-810F, the RPT-2208G-X1 switch series is a powerful compact device that can perform under various environmental conditions, such as power input voltage, shock, drop and vibration.

## SPECIFICATIONS

### Switch Properties

Processing Scheme	Store-and-forward
MAC Address Table	16 k
Packet Buffer Size	2 Mbit
Jumbo Frame	10 kByte

### Ethernet

Standards	IEEE 802.3 for 10 BaseT
	IEEE 802.3u for 100 Base T(X)
	IEEE 802.3u for 100 Base F(X)
	IEEE 802.3ab for 1000 Base T(X)
	IEEE 802.3ab for 1000 Base T
	IEEE 802.3z for 1000 Base-X
	IEEE 802.3x for Flow Control, back pressure flow control
	IEEE 802.3az for Energy Efficient Ethernet
	IEEE 802.1q for VLAN tagging (Prioritization of Profinet Packets) IEEE 802.1p for CoS (Prioritization of Profinet Packets)
	IEEE 802.1ae for MACsec
Flow Control	Back pressure and pause frame-based flow control schemes
Transmission Rate	RJ45: 10/100/1000 Mbps SFP: 100/1000 Mbps
Auto MDI/MDI-X	Yes

### Power

Input Voltage	9~48 VDC, dual power input
Input Current (System)	0.64 A Max
Power Consumption (System)	5.8 W Max
Power input	5-pin Terminal block

### LED

Indication	P1, P2, Fault
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### Physical Characteristics

Housing	IP30 aluminum housing
Dimension (W x H x D) Weight	45.3mm x 89.6mm x 110mm, 400g
Installation	DIN-Rail , Wall mount (optional kit)

### Environmental Limits

Operating Temperature	-20°C~70°C (-4°F~158°F)
Storage Temperature	-40°C~85°C (-40°F~185°F)
Ambient Relative Humidity	5%~95%, 55°C (Non-condensing)

## SPECIFICATIONS

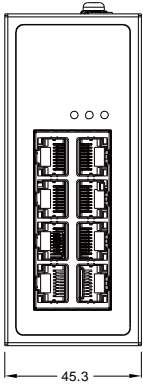
### Regulatory Approvals

Safety	EN60950-1:2006, UL/IEC(CB) 60950-1:2006, UL 62368-1 / IEC 62368-1 / EN62368-1			
EMC	FCC Part 15, Subpart B, Class A, Class B EN 55032:2015 + AC:2016 ( Class B, EN55024), EN 61000-6-2, EN 61000-6-4,			
Test	Item		Value	Level
IEC 61000-4-2	ESD	Contact	±8KV	4
		Discharge Air Discharge	±15KV	4
IEC 61000-4-3	RS	80-1000MHz	10(V/m)	3
		1.4-2.0GHz	3(V/m)	3
		2.0-2.7GHz	1(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
		DC Power Port	Line-to Earth±2.0kV	
		Signal 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	30A/m	3
IEC 61000-4-11	DIP	AC Power Port	-	-
Shock Drop	MIL-STD-810F Method 516.5, IEC 60068-2-27 MIL-STD-810F Method 516.5, IEC 60068-2-32			
Vibration	MIL-STD-810F Method 514.5 C-1 & C-2, IEC 60068-2-6			
RoHS II	Yes			
MTBF	25.83 years (@25 degrees C, according to MIL-HDBK-217F)			
Warranty	5 years			

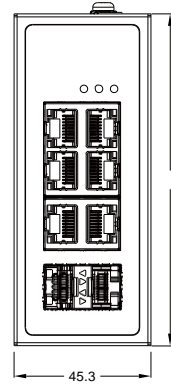
## DIMENSIONS

Front View

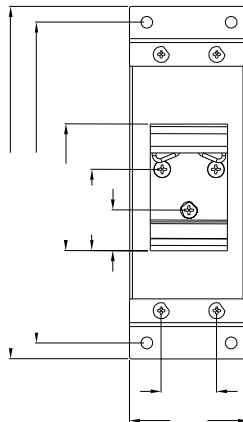
RPT-2208-X1



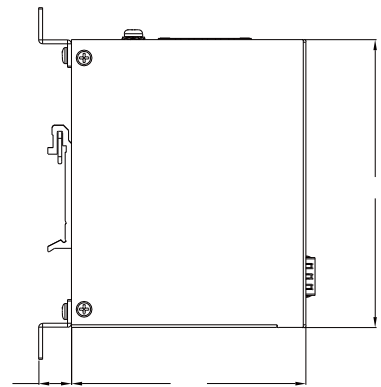
RPT-2208-2F-X1



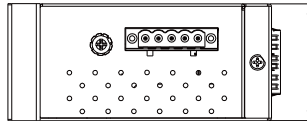
Side View



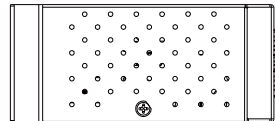
Rear View



Top View



Bottom View



## ORDERING INFORMATION

Model name	Unencrypted RJ45 ports	MACsec encrypted ports	
		RJ45 ports	SFP slots
RPT-2208G-X1	6	2	-
RPT-2208G-2F-X1	6	-	2

### Optional Accessories

Model name	Description
Wall Mount set	45.4 x22.8 x1.5 Aluminum wall mount with screw