

SK222XP-14R User Manual

-V1.0

1. Summary

1.1 Description

SK222XP-14R gets 14 in&out PLC with Analog function. It can not support the expansion board, but with the lowest price.

1.2 Parameter

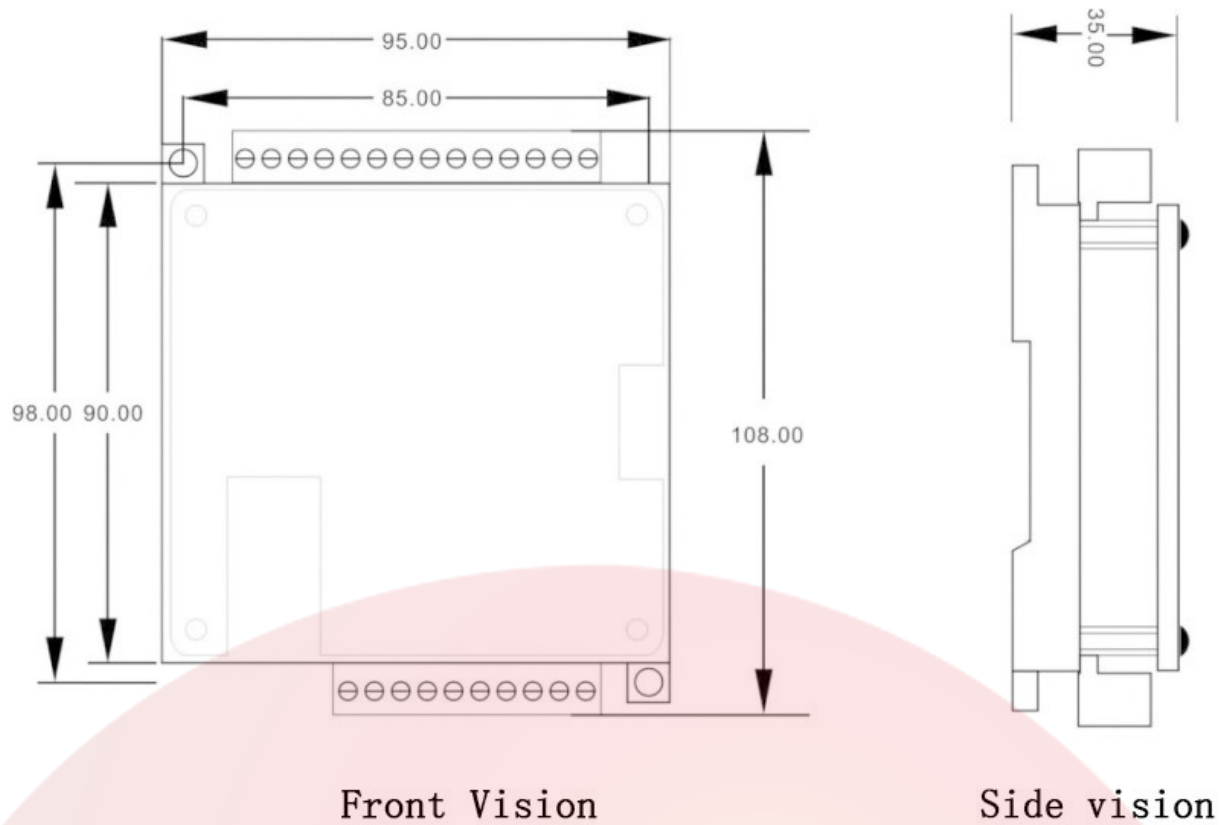
Item	SK222XP-14R
Digit in	8
Digit out	6
Analog in	2(Volt and current switchable)
Analog out	1
RS485	1 Channel
Expansion	NO
Power	24VDC

1.3 Function

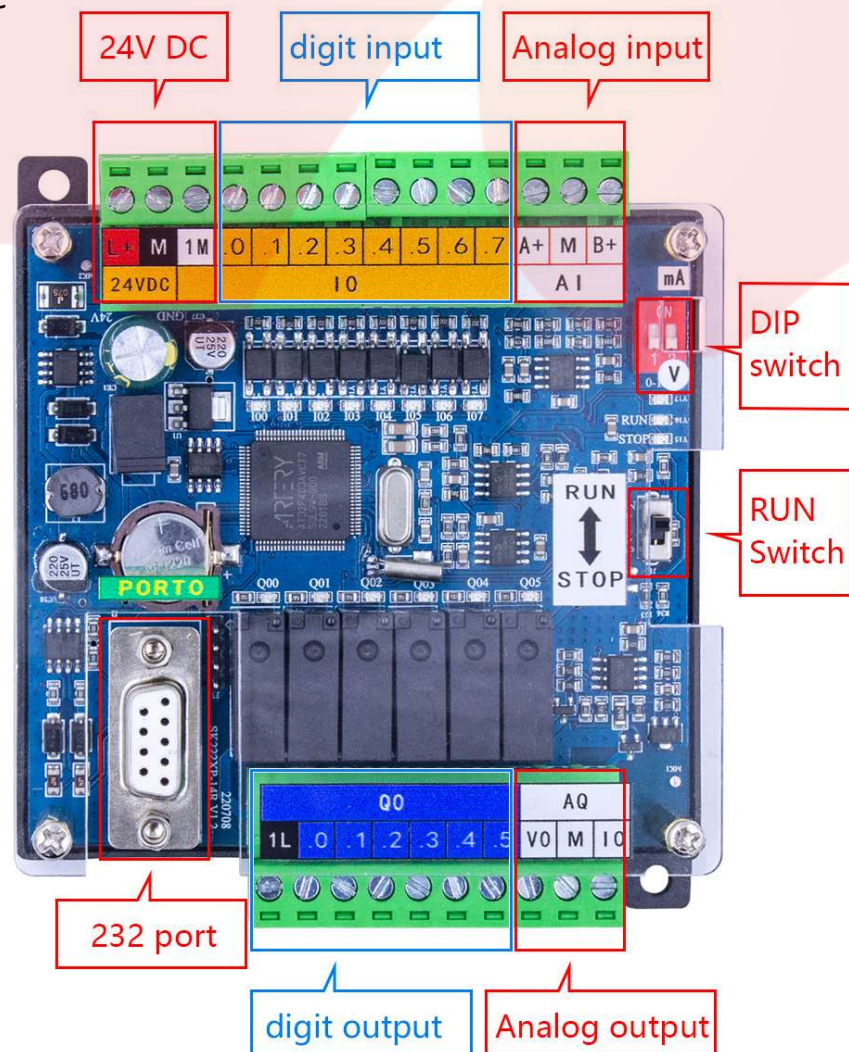
- a. Compatible with all S7 program and command.
- b. Analog input Volt or current
- c. NPN or PNP input supported
- d. Analog input recognize low power
- e. 1 PPI port support 187.5k baud rate
- f. Support PPI, MODBUS, free port and USS
- g. Inner RTC
- h. Encrypted for safe use when you need
- i. Power drop-off protection
- j. Anti-static protection and wiring anti-fool
- k. PID supported and multi-channel

2. Display

2.1 Dimension and installation



2.2 Real picture

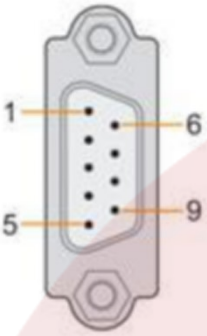


3. Electric

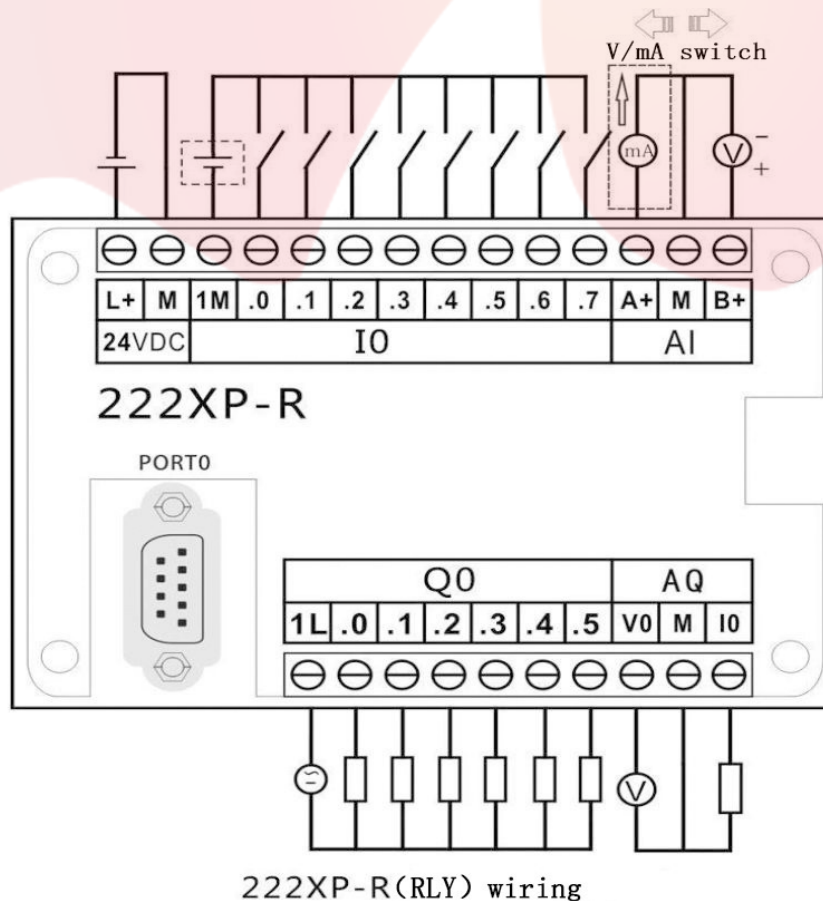
3.1 Power supply and consumption

DC24V supply; Static current 10mA; 1Channel for 8mA current and full channel 60mA(1.44W).

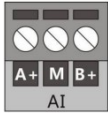
3.2 port definition

PORT0, PORT1		
Connector	Pin	PORT0
	1	Shell to GND
	2	+24V GND
	3	RS485 A
	4	Transmit RTS
	5	+5V GND
	6	+5V
	7	+24V GND
	8	RS485 B
	9	NC
	Shell	GND

3.3 Wiring



3.4 Analog input instruction

Analog in	Definition	DIP
	A+: AIW0 0-10V or 0-20mA in	
	M: input COM port	
	B+: AIW2 0-10V or 0-20mA in	

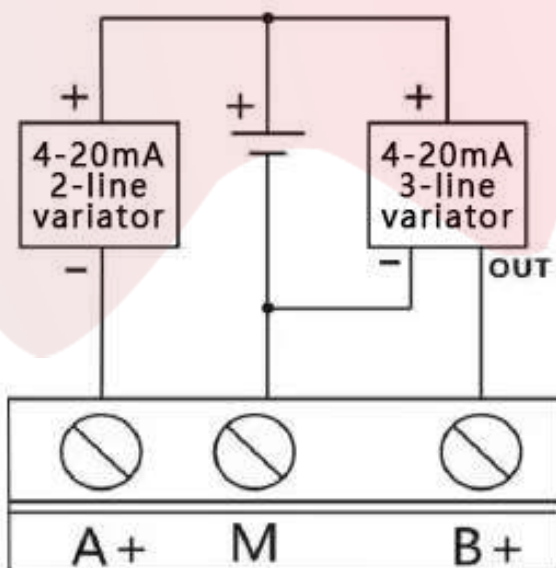
Attn: DIP switch the Volt or current input. 1 for A+; 2 for B+. ON for current; OFF for Volt.

3.5 Analog out

Analog out	Definition	
	V0: AQW0, 0-10V	/
	M: output COM port	
	B+: AQW0, 0-20mA	

Attn: Volt and current in the same time, controlled by AQW0.

3.6 4-20mA 2/3 line wiring



Attn: Before current signal wiring, pls turn analog input to current by DIP.

4. Parameter

Item	Content		
	1	2	3
Model	SK222XP-14R		
Power	7W		
Storage	Program	16K	/
	Data	10K	
I/O	Digit in	8	/
	Digit out	6	
	Digit IO map zone	256 (128DI/128DO)	
	Analog IO map zone	64 (32AI/32AO)	
	Max Expansion	/	
	Pulse in	6 CH 30K	
	Pulse out	2 CH 100K	
Inner part	Timer	256	/
	Counter	256	
	Analog potentiometer	/	
	Time stop	2 of 1ms resolution	
	RTC	Yes	
	Boolean instruction efficiency	0.28uS	
	Float efficiency	0.75uS	
Integrated communication	Port	1 RS485 PPI	/
	PPI Baud rate	9.6k/19.2k/ 187.5kbps	
	Free Baud rate	1.2k-115.2kbps	
	Max cable length	Isolated intermediate relay used: 187.5kbps Max 1KM	
	Max station	Each phase 32 stations, total network 126	
	Max host station	32	
Power	Input volt	DC24V	20.4-28.8VDC

	Current	80mA	/
	Isolation	No	
	Sensor volt	L±1V	
	Current rated	1.5A peak 0.7A normal	
Digit input	point	8	/
	Input type	PNP/NPN	
	Volt	24VDC, 4mA	
	Max constant volt	30VDC	
	Wave volt	35VDC/0.5s	
	Logic 1 volt scope	15V-30VDC	
	Logic 0 volt scope	0-5VDC	
	Input delay	0.2-12.8ms	
	Isolation	yes	
	Optical isolation	500VDC/1min	
	Counter speed	30KHZ single	
	Channel input	All at the same time	
	Max cable length	500M	
Digit output	point	6	/
	Type	Relay	5A
		Transistor	24V DC/0.8A for 1
	COM current	6A	/
	Resistor	0.2Ω(0.6Ω max)	
	Optical isolation	500VAC/1min	
Analog input	point	2	/
	Way	Single terminal	
	Type	0~10V / 0~20mA	
	Resistance	Volt 30K	Current 120Ω
	Format	-32000~32000	/
	Resolution	12 bit	
	Offset	Worst 0°-55°C	±full range 2.5%
		Typical 25°C	±full range

			1.0%
		Repeat	±full range 0.05%
	Analog to digit time	100ms	/
Analog out	point	1	/
	Volt scope	0~10V	
	Current scope	0~20mA	
	Format	0~32000	
	Offset	Worst 0°-55°C	±full range 3%
		Typical 25°C	±full range 2.5%
		Repeat	±full range 1%
	Conversion	50uS	/
	Load	0~10V	>5KΩ
		0~20mA	<500Ω
Dimension	(W x H x D) mm	95x108x35	/

5. Warranty terms

5.1 Warranty period

The product provides a one-year warranty from the date of delivery. During the warranty period, our company will provide free maintenance services for the product.

5.2 Not supported by warranty

- a. Positive and negative part of power is reversed.
- b. Wrong voltage range or using environment.
- c. Unauthorized changes to internal components