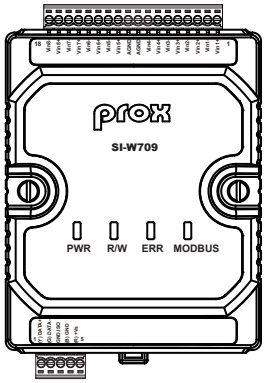
PROTECH Group

SI-W709

Quick Reference Guide

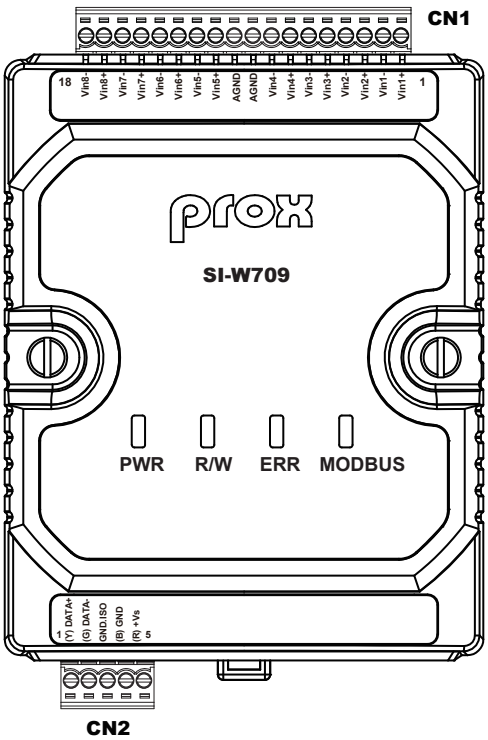


Ver. Q2

Specifications

System	
Communication Interface	RS-485
Baud Rate	9,600 bps ~ 115,200 bps (Max)
Communication Protocol	Modbus / RTU
Intra-module Isolation	3000V
Installation	DIN-Rail, Wall Mount
LED Indicator	Power LED, Green R/W LED, Orange Error LED, Red Modbus LED, Green
I2C Interface	Temperature / Humidity Sensor Module
Power Supply	9 ~ 50V DC In from terminal block
System Weight	220g
Dimension (W x H x D)	115 x 90 x 40mm
Certifications	CE / FCC
I/O - Analog Input	
Channels	8
Wiring	Differential
Sensor Tye Thermocouple	J, K, T, E, R, S, B
Sensor Tye Voltage	±15 mV, ±50 mV, ±100 mV, ±500 mV, ±1V, ±2.5V
Sensor Tye Current	±20 mA, 0 ~ 20 mA, +4 ~ 20 mA
Resolution	16-bit
Sample Rate	10Hz (Total)
Accuracy	0.1% of FSR
Input Impedance	>400 KΩ
Common Voltage Protection	25V DC
Overvoltage Protection	±120V DC
Environment	
Operating Temperature (with airflow)	-25°C ~ 75 °C (-13 °F ~ 167°F)
Storage Temperature	-40°C ~ 85°C (-40°F ~ 185°F)
Humidity	20%~ 90%

Pin Assignment



I/O Channel Connector (CN1)

Pin No.	Signal
1	Analog Input 1+
2	Analog Input 1-
3	Analog Input 2+
4	Analog Input 2-
5	Analog Input 3+
6	Analog Input 3-
7	Analog Input 4+
8	Analog Input 4-
9	Analog _GND
10	Analog _GND
11	Analog Input 5+
12	Analog Input 5-
13	Analog Input 6+
14	Analog Input 6-
15	Analog Input 7+
16	Analog Input 7-
17	Analog Input 8+
18	Analog Input 8-

RS-485 and Power Connector (CN2)

Pin No.	Signal
1	(Y)DATA+
2	(G)DATA-
3	GND.ISO
4	(B)GND-
5	(R)+Vs

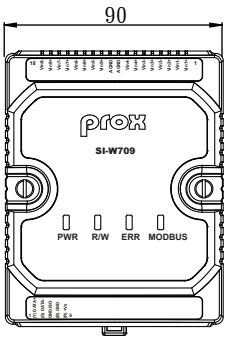
SI-W709

Thermocouple I/O Module

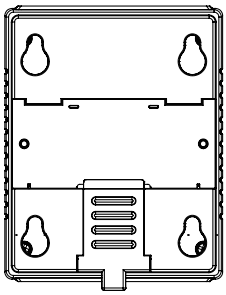
Overview

(Unit: mm)

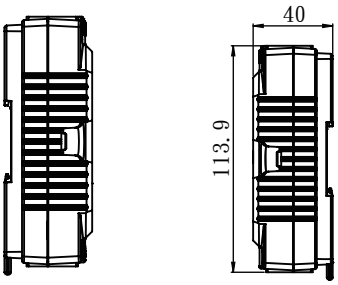
Front View



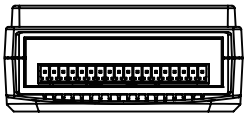
Rear View



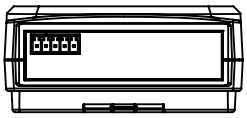
Side View



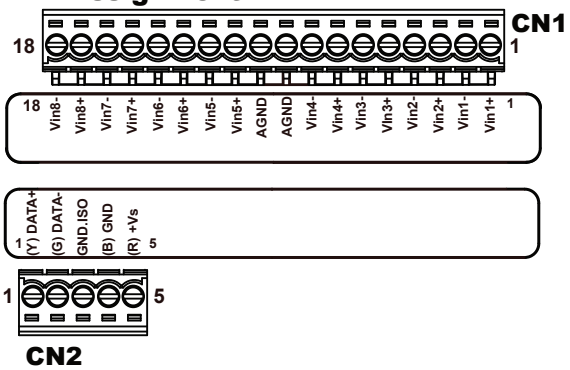
Top View



Bottom View

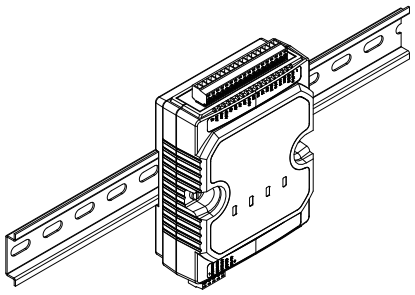


Pin Assignment



Quick Setup

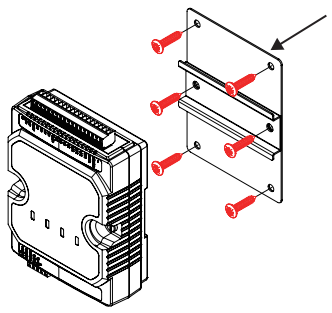
Installing DIN-RAIL Mount



Installing Wall Mount

Step 1. Prepare and fasten the 2 or 4 self-tapping T5 screws to tighten the wall mount kit onto the wall.

Step 2. Attach the SI-W709 onto the wall mount kit installed on the wall to complete.

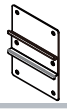


Wall Mount Accessories

Screw

Self-Tapping Screw T5 x 4 (/2)

Wall Mount Kit



Wall Mount Kit x 1

Safety Precaution

The following messages are reminders for safety on how to protect SI-W709 from damages and extend a long life for SI-W709.

1. Check the Cable Voltage

- The range of operating voltage should be DC 9~50V. Otherwise, the SI-W709 module could be damaged.

2. Environmental Conditions

- Place your SI-W709 on a sturdy, level surface. Be sure to allow enough space to have easy access around SI-W709.
- Avoid extremely hot or cold place to install the SI-W709.
- Avoid exposure to sunlight for a long period of time or in an airtight space.
- Avoid SI-W709 from any heating device or using SI-W709 when it's been left outdoors in a cold winter day.
- Avoid moving SI-W709 rapidly from a hot place to a cold place and vice versa because condensation may come from inside of SI-W709.
- Don't place S7-W709 close to any radio-active device in case of signal interference.

3. Handling

- Avoid putting heavy objects on top of SI-W709.
- Do not turn SI-W709 upside down.

4. Good Care

- When the outside of the case is stained, remove the stain with a neutral washing agent with a dry cloth.
- Never use strong agents such as benzene and thinner to clean SI-W709.
- If heavy stains are present, moisten a cloth with diluted neutral washing agent or with alcohol and then wipe thoroughly with a dry cloth.
- If dust has been accumulated on the outside, remove it by using a special vacuum cleaner for computers.

WARNING! Some internal parts of SI-W709 may have high electrical voltage. And therefore we strongly recommended that qualified engineers can open and disassemble SI-W709.