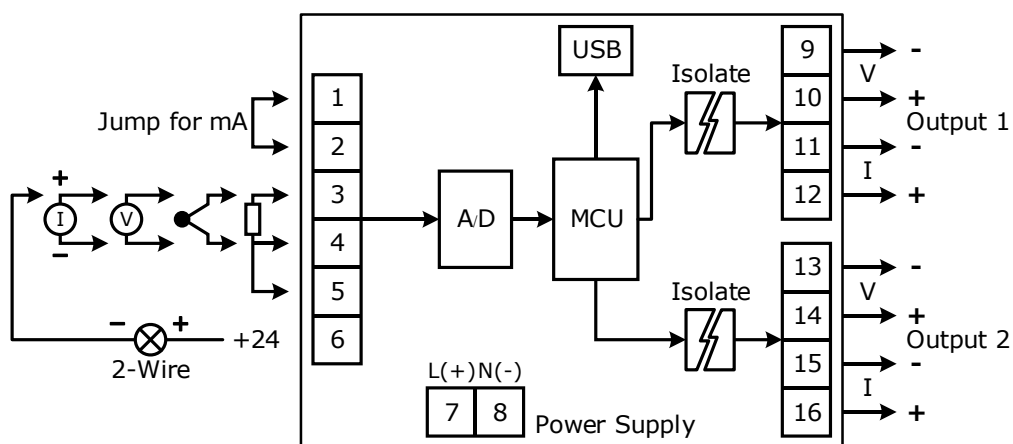


Universal Signal Conditioner SC22



- Programmable input
- Two isolated output
- Isolated input, output and power supply
- Universal Conversions
- 4-20 mA, 0-10 VDC, 0-5 VDC transmitter output
- High accuracy (16bit)
- Low cost
- Easy to install

Universal Signal Conditioner SC22 A signal conditioner is a device that converts one type of electronic signal into a another type of signal. Its primary use is to convert a signal that may be difficult to read by conventional instrumentation into a more easily read format.



Specifications

USB Interface

Compliance: USB 1.1/2.0

Connector: USB Type Mini-A (Female)

Speed: 12 Mbps (Full-Speed USB)

Class: CDC

Analog Input

Number of Channel: 1 Channel

Input Type: Programmable Input

Input Range:

Thermocouple: R, S, K, E, J, T, B

RTD: Cu10, PT100, PT1000

Resistance: 0 to 600 Ω , 0 to 1.2 K Ω ,
0 to 4 K Ω

Voltage (mVDC): 0 to 80, 0 to 150

Voltage (VDC): 0 to 1, 0 to 5, 0 to 10,
0 to 15, 0 to 30

Current: 4 to 20 mA, 0 to 20 mA,
0 to 40 mA

Loop Powered: 24 VDC (Source 2-Wire)

ADC Resolution: 16 Bits

Analog Output

Number of Channel: 2 Channels

Output Type: Current, Voltage
(Programmable Output)

Ordering Information: Specify Power Supply

Example SC22/12to24VDC

Package Checklist

1. SC22
2. USB Cable

Output Rang:

Current (4 to 20 mA)

Voltage (0 to 5, 1 to 5, 0 to 10 VDC)

Output Load Resistance:

Current (Max. 1000 Ω Load)

Voltage (Min. 5000 Ω Load)

Isolation Voltage: 500 VAC, between
input output and power supply

Power Requirements

Power Supply: 12 to 24 VDC

(85 to 230 VAC Optional)

Power Consumption

Standby: 155 mA @ 12 VDC

Environmental Limits

Operating Temperature: 0 to 55 $^{\circ}\text{C}$

Operating Humidity: 5 to 95% RH

Storage Temperature: 0 to 70 $^{\circ}\text{C}$

Physical Characteristics

Dimension: W20 x H100 x D118 mm.

Mounting: DIN Rail

Warranty

Warranty Period: 5 Year

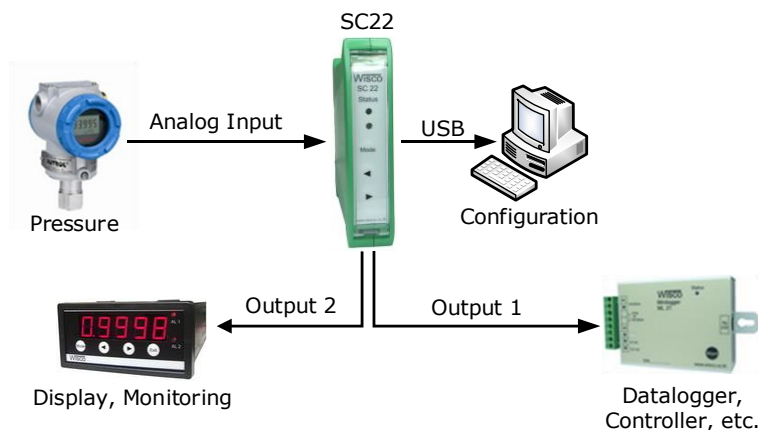


Table 1. Shown Accuracy and Resolution Each Input Type

T.1	แสดงรหัสชนิดของค่าอนาล็อกอินพุต				
Code	Input Type	Measuring Range	Resolution	Accuracy (%FS) (Temp. 25 °C)	
0	Not Use	—	—	—	
1	Thermocouple	R	0 – 1700 °C	1 °C	±0.2% (3.4 °C)
2		S	0 – 1700 °C	1 °C	±0.2% (3.4 °C)
3		K	(-)250.0 – 1300.0 °C	0.1 °C	±0.2% (2.6 °C)
4		E	0.0 – 1000.0 °C	0.1 °C	±0.2% (2.0 °C)
5		J	(-)200.0 – 700.0 °C	0.1 °C	±0.2% (1.4 °C)
6		T	(-)250.0 – 400.0 °C	0.1 °C	±0.2% (0.8 °C)
7		B	600 – 1800 °C	1 °C	±0.2% (3.6 °C)
20	R.T.D	Cu10	0 – 150 °C	1 °C	±0.1% (1.5 °C)
21		Pt100	(-)200.0 – 800.0 °C	0.1 °C	±0.1% (0.8 °C)
22		Pt1000	(-)200.0 – 800.0 °C	0.1 °C	±0.1% (0.8 °C)
30	R (Ohm)	600 Ω	0.00 – 600.00 Ω	0.01 Ω	±0.01% (0.06 Ω)
31		1200 Ω	0.0 – 1200.0 Ω	0.1 Ω	±0.02% (0.24 Ω)
32		4000 Ω	0.0 – 4000.0 Ω	0.1 Ω	±0.02% (0.8 Ω)
40	Voltage(mV)	0 – 80	0.000 – 80.000 mV	1 μV	±0.1% (8 μV)
41		0 – 150	0.00 – 150.00 mV	10 μV	±0.02% (30 μV)
42	Voltage (V)	0 – 1	0.0000 – 1.0000 V	100 μV	±0.05% (500 μV)
43		0 – 5	0.000 – 5.000 V	1 mV	±0.04% (2 mV)
44		0 – 15	0.000 – 15.000 V	1 mV	±0.02% (3 mV)
45		0 – 30	0.00 – 30.00 V	10 mV	±0.033% (10 mV)
60	Current(mA)	4 – 20	4.000 – 20.000 mA	1 μA	±0.01% (5 μA)
61		0 – 20	0.000 – 20.000 mA	1 μA	±0.01% (5 μA)
62		0 – 40	0.000 – 40.000 mA	1 μA	±0.05% (0.0 A)