

SGI

RoHS

Isolator (1-output)

Features:

SGI (1-input 1-output) is a simple isolator for the standard I/O signals 4 to 20mA DC and 1 to 5V DC. It converts 4 to 20mA DC or 1 to 5V DC into isolated 4 to 20mA DC or 1 to 5V DC. Indication displays are equipped.

Functions:

- Sensor correction (Input value correction)
- Normal/Reverse mode
- Filter time constant
- Manual mode
- Input and output types can be changed.

Model: SGI - ① - ② - ③ - ④

Model name
Input 1
Output 1
Power supply
Option



① INPUT 1

DC Current	A0	4 to 20mA (Built-in 50Ω shunt resistor)
	A1	4 to 20mA (250Ω shunt resistor)
	A2	4 to 20mA (50Ω shunt resistor)
DC Voltage	V6	1 to 5V (Input resistance 1MΩ)

② OUTPUT 1

DC Current	1	4 to 20mA (allowable load resistance 750Ω max.)
DC Voltage	E	1 to 5V (allowable load resistance 5000Ω min.)

③ Power supply

0	100 to 240V AC 50/60Hz
1	24V AC/DC 50/60Hz

For SGIL (with serial communication function), only [0: 100 to 240V AC] is selectable.

④ Option

0	No option needed
1	Multi-rotation trimmer
2	Moisture-proof treatment
3	Multi-rotation trimmer + Moisture-proof treatment

Performance

Base accuracy (at 25°C)	±0.1% of each input span
Display accuracy	Base accuracy ± 1 digit
Temperature coefficient	± 0.015%/°C
Response time	0.5 sec. max. (0→90%)
Insulation resistance	100MΩ minimum, at 500V DC.
Dielectric strength	2.0kV AC for 1 minute

General specifications

Input	DC current	4 to 20mA DC	
	DC voltage	1 to 5V DC	
Zero adjustment range	-5 to 5% (Adjustable from front panel)	Span adjustment range	95 to 105% (Adjustable from front panel)
Power supply	100 to 240V AC 50/60Hz	Allowable voltage range	85 to 264V AC
	24V AC/DC 50/60Hz		20 to 28V AC/DC
Power consumption	100 to 240 V AC: Approx. 9 VA max. (SGIL: Approx. 10 VA max.)		
	24 V AC: Approx. 6 VA max.		
	24 V DC: Approx. 3 W max.		
Operating temperature, humidity	-10 to 55°C (Non-condensing, No icing), 35 to 85%RH (Non-condensing)		
Storage temperature	-10 to 60°C		
Material	Case: Flame-resistant resin, Black color, Panel: Polycarbonate		
Mounting method	DIN rail		
External dimensions	22.5(W) x 89(H) x 70(D)mm (without socket)		
Weight	Approx. 77g (without socket)		

Measurement range

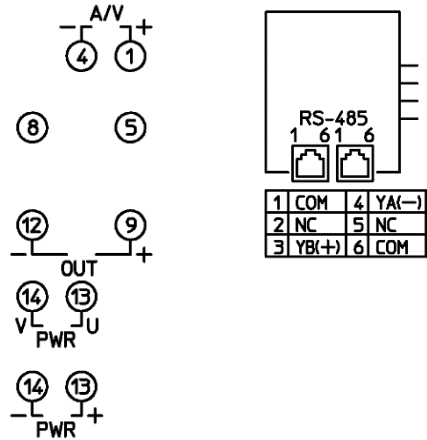
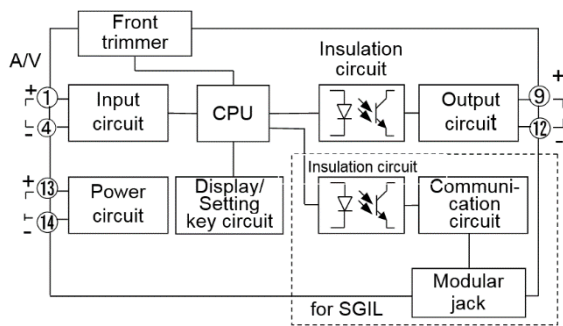
Input code	Measurement range	Resolution
A0	-1999 to 9999	1
A1		1
A2		1
V6		1

※ Decimal point position change and scaling are possible.

Terminal arrangement

PWR ⑬ - ⑭	Power supply voltage 100 to 240V AC, 24V AC/DC
OUT ⑨ - ⑫	Output
A ① - ④	DC current input
V ① - ④	DC voltage input
RS-485	Serial communication RS-485 (For SGIL)

Circuit configuration



(8P Socket)