Shinko

SEW SERIES

SPEC SHEET

2-output RTD Transmitter (With Indication Function) Model: SEWR

■ Model

SEWR-□-□

Socket
- 1: Screw fall prevention, Finger-safe (For Y terminal)
- 2: For Ring terminal

Power supply
- 0: 100 to 240V AC
- 1: 24V AC/DC

■ How to Order

Specify a model. (e.g.) SEWR-1-0

Factory Default Value:

Input	Pt100: -200 to 850℃
Output 1	4 to 20mA DC
Output 2	4 to 20mA DC

■ Accessories (Sold Separately)

Communication cable to connect console software: CMB-001

■ Input Specifications

RTD (3-wire type)

Input detection current: Approx. 0.2mA

Allowable lead wire resistance: 10Ω or less per wire

Burnout: Upscale, Downscale (Selectable by the keypad)

Input

RTD	Input Range	
Pt100	-200 to 850℃	-328 to 1562℉
JPt100	-200 to 500℃	-328 to 932℉

Minimum span: 50℃ (100℉)

■ Output Specifications

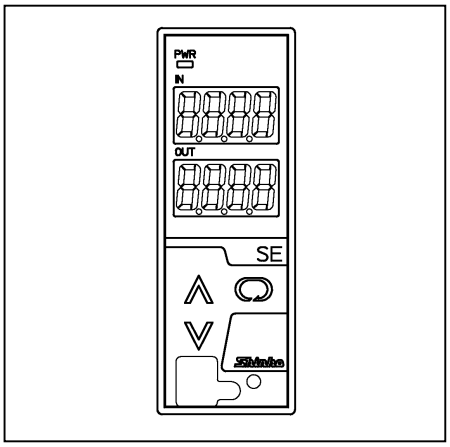
When the output range lower limit is zero, (even if zero adjustment results in a negative value), the output value will not be negative.

DC Current

Output range	Allowable load resistance	Zero adjustment range	Span adjustment range
4 to 20mA DC	700Ω or less	-5 to 5%	95 to 105%
0 to 20mA DC	700Ω or less	0 to 5%	95 to 105%
0 to 12mA DC	1.2kΩ or less	0 to 5%	95 to 105%
0 to 10mA DC	1.2kΩ or less	0 to 5%	95 to 105%
1 to 5mA DC	2.4kΩ or less	-5 to 5%	95 to 105%

DC Voltage

Output range	Allowable load resistance	Zero adjustment range	Span adjustment range
0 to 1V DC	100Ω or more	0 to 5%	95 to 105%
0 to 5V DC	500Ω or more	0 to 5%	95 to 105%
1 to 5V DC	500Ω or more	-5 to 5%	95 to 105%
0 to 10V DC	1kΩ or more	0 to 5%	95 to 105%



■ Performance

Basic accuracy (at 23℃ of ambient temperature)
- Input: Within ±0.1% of each input span
- Output: Within ±0.1%

Cold junction compensation accuracy: Within ±1℃ at -5 to 55℃

Indication accuracy: Within Basic input accuracy ±1 digit

Input sampling period: 25ms, 125ms, 250ms (Selectable by the keypad)

Response time: (Selectable by the keypad)
- 65ms (typ.) (0→90%) (Input sampling period: 25ms)
- 225ms (typ.) (0→90%) (Input sampling period: 125ms)
- 425ms (typ.) (0→90%) (Input sampling period: 250ms)

Temperature coefficient: ±0.015%/℃ or less

Insulation resistance: 10MΩ or more, at 500V DC (Input - Output - Power)

Dielectric strength: 2.0kV AC for 1 minute (Input - Output - Power)

■ General Structure

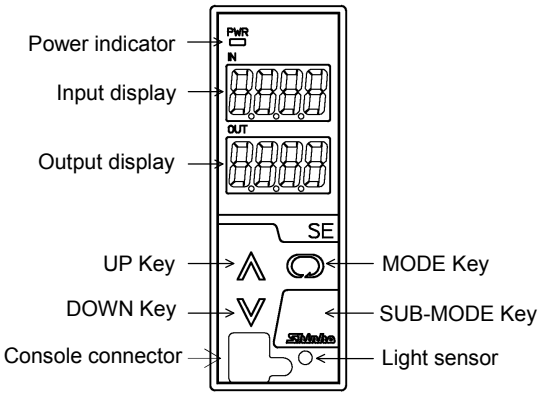
Case: Flame-resistant resin Color: Light gray

Front panel: Membrane sheet

Setting: Using front keypad

Connector for console software: Only CMB-001 cable usable

Displays and indicators:
- Input display: 7-segment Red LED display 4-digit, Character size: 10 x 4.6mm (H x W)
- Output display: 7-segment Red LED display 4-digit, Character size: 10 x 4.6mm (H x W)
- Power indicator: Green LED



■ Installation Specifications

Power supply: 100 to 240V AC 50/60Hz
24V AC/DC 50/60Hz
Allowable voltage range: 85 to 264V AC, 20 to 28V AC/DC
Power consumption: Approx. 8VA
Ambient temperature: -5 to 55℃
Ambient humidity: 35 to 85%RH (non-condensing)
Weight: Approx.190g (including socket)
Mounting: DIN rail
Dimensions: W30 x H88 x D108mm (including socket)

■ Attached Functions

Light sensor: Automatically measures and controls brightness of the displays, saving energy.
Power failure countermeasure:
The data is backed up in non-volatile IC memory.
Self diagnosis: The CPU is monitored by a watchdog timer, and when an abnormal status is found on the CPU, the unit is switched to warm-up status turning all outputs OFF.

■ Environmental Specification

RoHS directive compliance

■ Settings

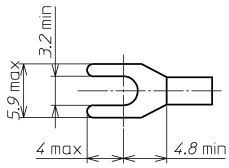
Function Keys
(1) UP Key: Increases numeric value.
(2) DOWN Key: Decreases numeric value.
(3) MODE Key: Selects a setting mode.
(4) SUB-MODE Key: Lights the displays again when in unlit status.

■ Displays and Indicators

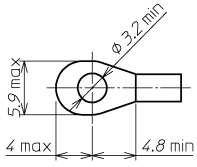
Input display: Indicates the input value.
When a range with a decimal point is selected:
Indication of -200.0 or less: The minus (-) sign and input value light alternately.
Under range: "- - - - -" flashes on the Input display.
Over range: " " flashes on the Input display.
Warm-up indication:
For approx. 3 seconds after the power to the instrument is turned on, input type is indicated on the Input display, and Output 1 type is indicated on the Output display.
Output display: Indicates the output volume in percentage (%) form.
Power indicator: A green LED is lit when the power to the instrument is turned on.

■ Solderless Terminals

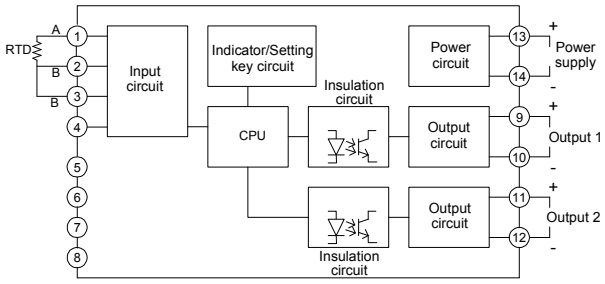
Y Terminal



Ring Terminal



■ Circuit Configuration, Terminal Arrangement



■ External Dimensions (Scale: mm)