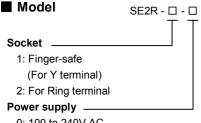
# SE series SPEC. SHEET

# **RTD Transmitter**

(with indication function)

Model: SE2R



0: 100 to 240V AC 1: 24V AC/DC

#### How to order

Specify the model (e.g.) SE2R-1-0

#### Default value

CH1 input	Pt100: -200 to 850 ℃
CH2 input	Pt100: -200 to 850 ℃
CH1 output	4 to 20mA DC
CH2 output	4 to 20mA DC

# Accessories (sold separately)

Communication cable for the console software: CMB-001

# ■ Input specification

RTD (3-wire system)

Input detection current: Approx. 0.2mAAllowable lead wire resistance:  $10\Omega$  or less per wire Burnout: Upscale, Downscale (Selectable by Keypad)

Input

RTD	Input range			
Pt100	-200 to 850 $^{\circ}\mathrm{C}$ -328 to 1562 $^{\circ}\mathrm{F}$			
JPt100	-200 to 500 ℃ -328 to 932 F			

Minimum span: 50°C (100°F)

#### Output specification

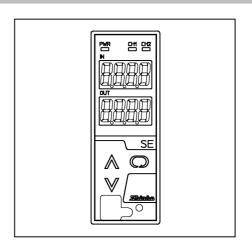
When the output range lower limit is zero, (even if zero adjustment results in a negative value), the output value will not be negative.

#### DC current

- · · · · · · · · · · · · · · · · · · ·					
Output range	Allowable load resistance	Zero adjustment range	Span adjustment range		
4 to 20mA DC	$700\Omega$ or less	-5 to 5%	95 to 105%		
0 to 20mA DC	$700\Omega$ or less	0 to 5%	95 to 105%		
0 to 12mA DC	1.2k $\Omega$ or less	0 to 5%	95 to 105%		
0 to10mA DC	1.2k $\Omega$ or less	0 to 5%	95 to 105%		
1 to 5mA DC	2.4kΩ or less	-5 to 5%	95 to 105%		

DC voltage

o voltage					
Output range	Allowable load resistance	Zero adjustment range	Span adjustment range		
0 to 1V DC	100 $\Omega$ or more	0 to 5%	95 to 105%		
0 to 5V DC	$500\Omega$ or more	0 to 5%	95 to 105%		
1 to 5V DC	500 $\Omega$ or more	-5 to 5%	95 to 105%		
0 to 10V DC	1k $\Omega$ or more	0 to 5%	95 to 105%		



#### ■ Performance

Accuracy (When ambient temperature is  $23^{\circ}C$ ): Input: Within  $\pm 0.1\%$  of each input span

Output: Within ±0.1%

Indication accuracy: Within input accuracy ±1 digit

Input sampling period: 25ms, 125ms, 250ms (Selectable by keypad) Response time: 65ms (typ.) (0—90%) (Input sampling period 25ms)

225ms (typ.)  $(0\rightarrow90\%)$  (Input sampling period 125ms) 425ms (typ.)  $(0\rightarrow90\%)$  (Input sampling period 250ms)

(Selectable by keypad Temperature coefficient: ±0.015%/°C or less

Insulation resistance:  $10M\Omega$  or more, at 500V DC

(Input – Output – Power supply)

Dielectric strength: 2.0kV AC for 1 minute

(Input - Output - Power supply)

# ■ General structure

Case: Flame-resistant resin, Color: Light gray

Front panel: Membrane sheet Setting: By the front keypad

Connector for console software: Only for CMB-001

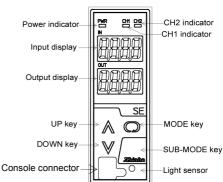
Indication: Input display: 7-segment, Red LED display 4-digit

Character size 10×4.6mm (H×W)

Output display: 7-segment, Red LED display 4-digit Character size 10×4.6mm (H×W)

Power indicator: Green LED

CH1 indicator: Yellow LED CH2 Indicator: Yellow 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°C

Ambient humidity: 35 to 85%RH (Non-condensing)

Mounting: DIN rail mounting

External dimensions: W30×H88×D108mm (including the socket)

Weight: Approx. 190g (including the socket)

#### Attached functions

Auto-light function: Display brightness is controlled in accordance with the surrounding area. Unnecessary brightness is reduced, saving energy.

Power failure countermeasure: The data is backed up in nonvolatile IC memory. Self diagnosis: The CPU is monitored by a watchdog timer, and

Self diagnosis: The CPU is monitored by a watchdog timer, ar when an abnormal status is found on the CPU, the unit is switched to warm-up status with tuning all outputs off.

# **■** Environmental specification

RoHS directive compliance

# Settings

Function keys

- (1) UP Key: Increases the numeric value.
- (2) DOWN Key: Decrease the numeric value.
- (3) MODE Key: Selects the setting mode.
- (4) SUB-MODE Key: Turns the displays ON again when they are in OFF status.

(The UP, DOWN or MODE Key also turns the displays ON again when they are in OFF status.)

# Displays and indicators

Input display: Indicates the input value

Indication of -200.0 or less (for the range with

decimal point):

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. 3sec. after the power to the instrument is turned on, the input type of CH1 is indicated on the input display, the input type of CH2 is indicated on the output display.

Output display: Indicates output volume in percentage (%) form. Power indicator: The green LED lights when the power to the

instrument is turned on.

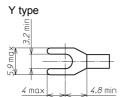
CH1 indicator: The yellow LED lights when CH1 is selected during

Display selection mode.

CH2 indicator: The yellow LED lights when CH2 is selected during

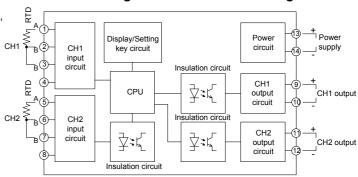
Display selection mode.

#### Solderless terminal





### ■ Circuit configuration and terminal arrangement



# **■** External dimensions (Scale: mm)

