**SH5800R****pH ANALYZER****OUTLINE**

The SH5800R is a digital pH ANALYZER in 96 × 96 DIN size case and has large-sized display excellent in visibility. Enhanced design allowed automatic buffer calibration, communication interface, and wide range of power input voltage. The functions are available for various applications in the field.

**FEATURES**

- SIMPLE OPERATION
- EXTRA-LARGE DIGITAL DISPLAY
- COMPACT SIZE IN 96 x 96 MM DIN CASE
- AUTOMATIC BUFFER CALIBRATION
- EVENT OUTPUTS STANDARD
- COMMUNICATION INTERFACE
- WIDE RANGE OF POWER INPUT VOLTAGE
- SELF DIAGNOSTICS

**SPECIFICATIONS**

**Input:** Glass electrode, Antimony electrode(pH) or ORP electrode(ORP)

**Input range:** 0 ~ 14pH or -1.500 ~ 1.500V (ORP)

**Output range:** Programmable, 4pH in span min. (0.5V at ORP) 1pH increment (0.1V at ORP)

**Output:** 4 ~ 20mA DC isolated, 600Ω max.

**Display:** 4 digits, 7 segments LED, dual

**Linearity:** ± 0.03pH (± 3mV)

**Repeatability:** ± 0.01pH (± 1mV)

**Alarm:** Up to 4 high or low alarms

**Number of set points:** 4 max.

**Set point range:** 0 ~ 14pH (-1.5 ~ 1.5V)

**Output relay:** Form-A, 250VAC 0.5A

**Hysteresis adjustment:** 0 ~ 14pH (-1.5 ~ 1.5V)

**ON delay timer:** 0 ~ 300 sec.

**Diagnostics output:** 1 Form-A, 250VAC 0.5A

**Self diagnostics:** Low pH -0.50pH and below, high pH (Error detection) 14.50pH and above, low temp. -25°C and below, high temp. 150°C and above, buffer standard and compensation curve

**Temperature compensation:** 0 ~ 100°C

**Temp.sensor:** Pt1000 (standard)

500Ω, 6.8kΩ, 10kΩ, 20kΩ

**Butter calibration:** JIS pH standard solution, auto-calibration or manual-calibration

**Output hold:** Programmable, at output, alarm contact and error contact

**Shift function:** 0.01 pH increments within ± 2.0pH  
0.1°C increments within ± 5.0°C

**Case strucure:** IP65 (only front panel)

**Operation conditions:** -10 ~ 50°C, 90%RH max.

**Power supply voltage:** 85 ~ 264VAC. 45 ~ 65Hz

**Power consumption:** 6VA @ 100VAC

**Weight:** Approx. 0.5 kg

**OPTION**

**Communication interface module:** RS-232C or RS-422A

**Rate:** 9600, 4800, 2400 1200, 600 or 300bps

**Interrupter:** 0 ~ 600 sec. replaces alarm 1 to 4

**Operation:** High or Low

**Cycle time:** 0 ~ 600 sec.

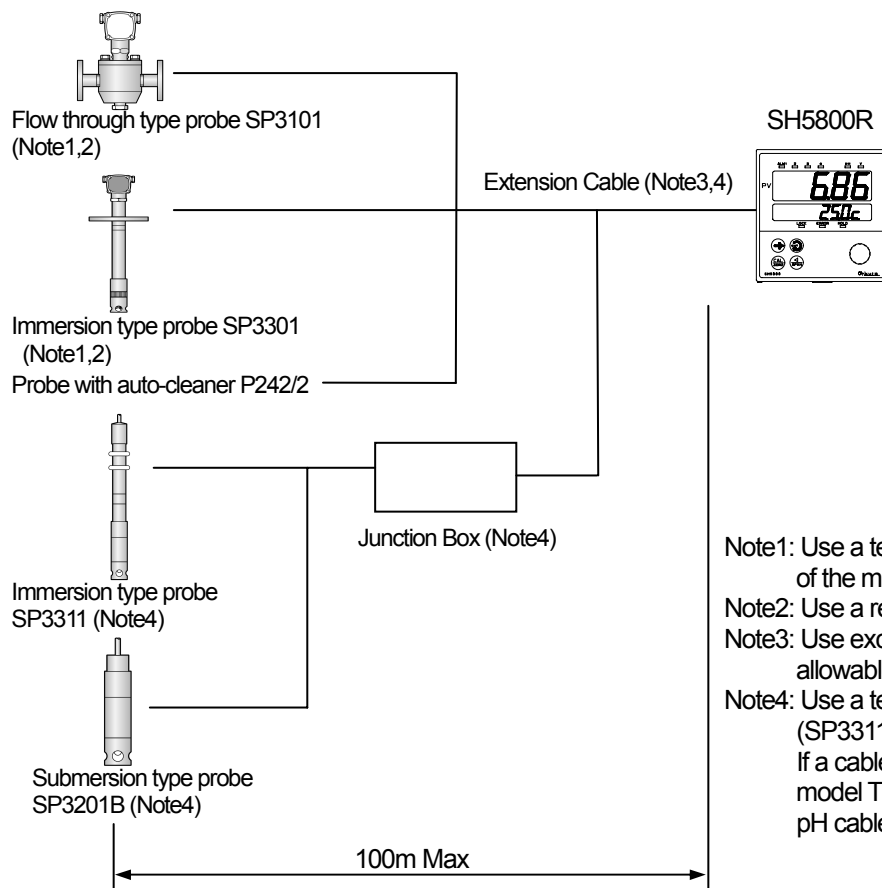
**On time:** 0 ~ 600 sec.

**On delay timer:** 0 ~ 300 sec.

**Solution temp. compensation:** 0.000-0.050pH/°C for high purity water

**Dust protection cover:** Installed on rear terminal panel

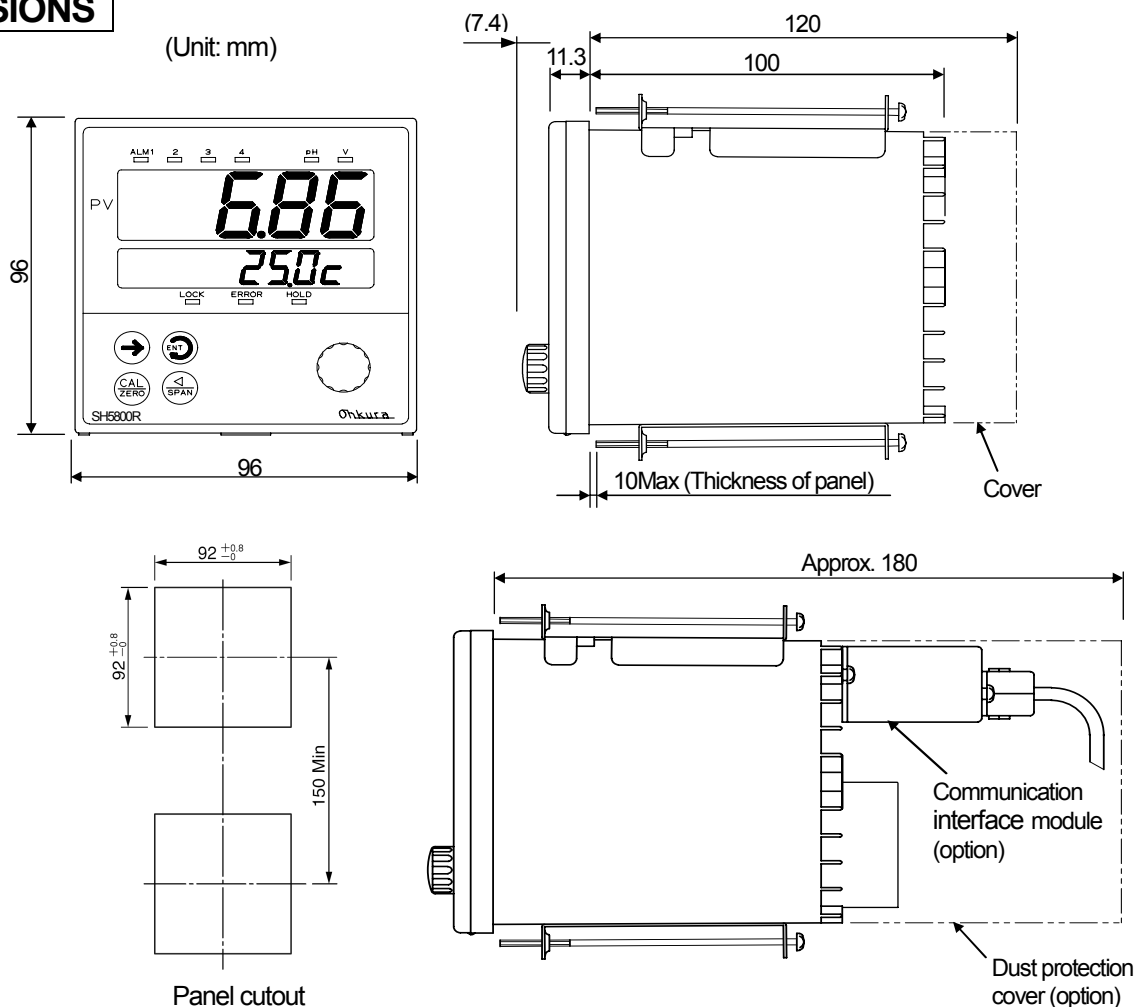
## PROBE & ANALYZER CONNECTION OVERVIEW



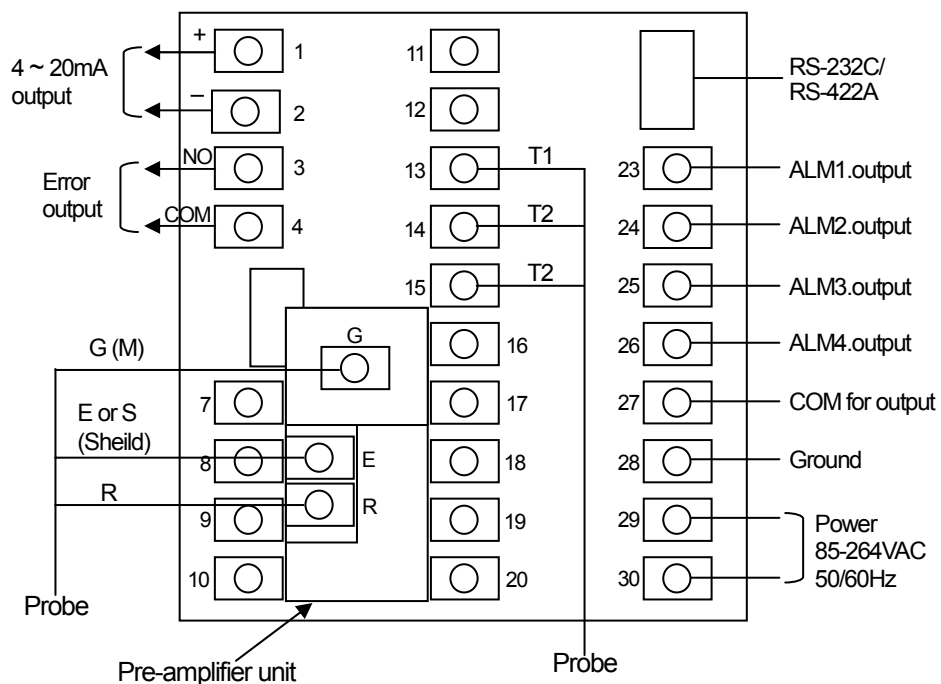
- Note1: Use a temperature compensation electrode of the model TC6000 (Pt1000)
- Note2: Use a reference electrode of the model NR3300
- Note3: Use exclusive pH cable model P301/2, allowable length 100m max.
- Note4: Use a temperature element Pt1000 type probe (SP3311A9x or SP3201Bx)  
If a cable of probe is not enough, use junction box model TB1001 and exclusive pH cable model P301/2, allowable length 100m max

## DIMENSIONS

(Unit: mm)



## TERMINAL ARRANGEMENT



Note: All of terminals have electrical connection inside.

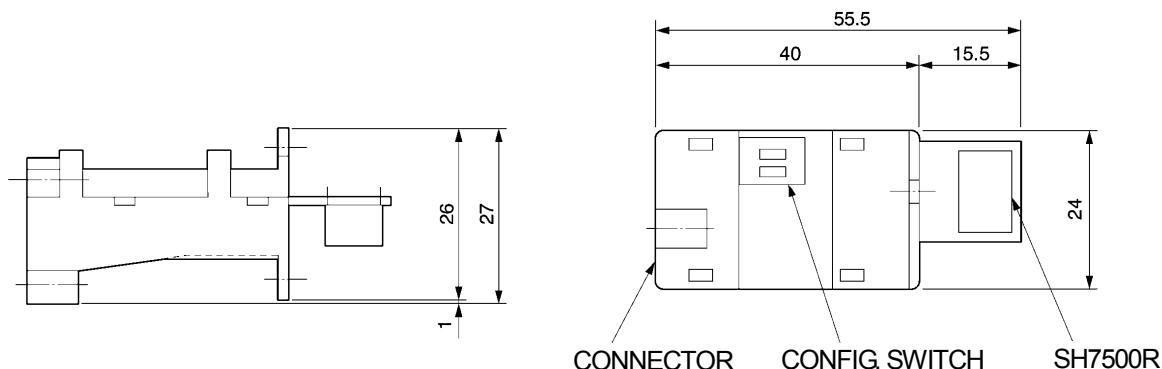
## MODEL CODE NUMBER

MODEL	DESCRIPTION	
SH58	Digital pH(ORP) analyzer	
	<b>CODE</b>	<b>INPUT</b>
	01R	Glass electrode
	02R	ORP electrode
	03R	Antimony electrode
	<b>CODE</b>	<b>COMMUNICATION MODULE</b>
	0	No communication module
	1	RS232C i communication interface module (ZE7101A0106) included
	2	RS422A i communication interface module (ZE7101A0206) included
	<b>CODE</b>	<b>INTERRUPTER</b>
	0	No interrupter
	1	Installed
	<b>CODE</b>	<b>SOLUTION TEMPERATURE COMPENSATION</b>
	0	None
	1	Installed
	<b>CODE</b>	<b>OPTIONAL ACCESSORIES</b>
	0	None
	1	Dust protection cover, terminal

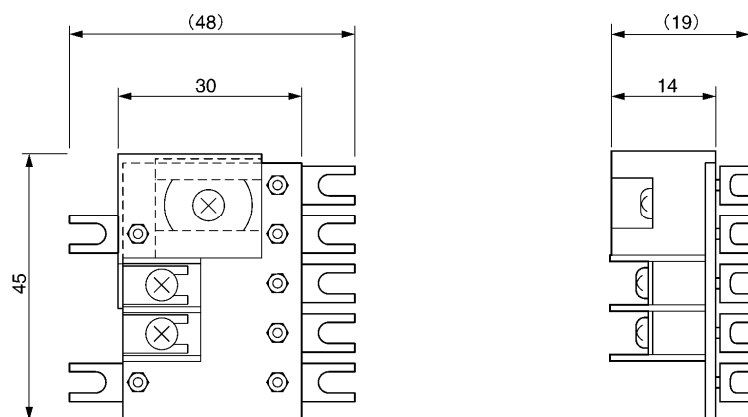
## COMMUNICATION INTERFACE MODDULE

ZE7101A0106: RS-232C Communication interface module, Cable HMSU2255B02, length=2m with D-sub connector

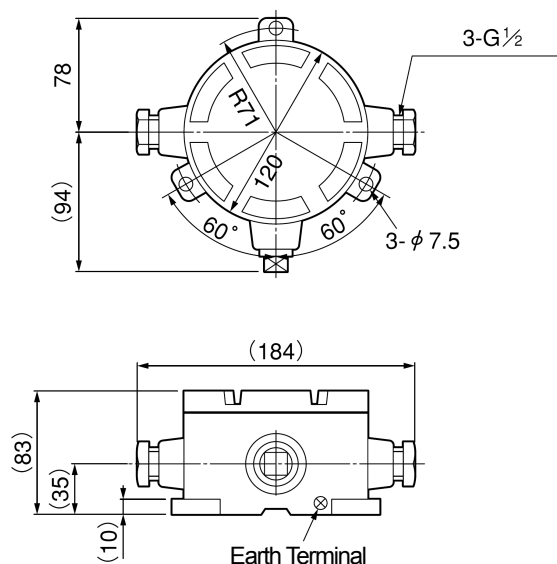
ZE7101A0206: RS-422A Communication interface module, Cable HMSU2691B01, length & number of ports to be specified



## PRE-AMPLIFIER UNIT (P/N HMSU3186A01)



## JUNCTION BOX (TYPE TB1001)



## ⚠ CAUTION

Do not install this device before consulting instruction manual

**Ohkura**

OHKURA ELECTRIC CO., LTD.

Head Office / Factory

Sales Offices

URL

e-mail (in English)

Saitama, JAPAN

Tokyo, Osaka, Nagoya, Kyushu

<http://www.ohkura.co.jp/>

contact\_e@ohkura.co.jp

Specifications are subject to change without notice.

For further information, a quotation or a demonstration please contact to: