

# SH7300A

pH(ORP) TRANSMITTER

SPEC-3122E

THE SH7300 IS A MICROPROCESSOR BASED DIGITAL pH(ORP) TRANSMITTER PROVIDES DIGITAL FIELD INDICATOR WITH 2 WIRED 4-20mA OUTPUT AND 24VDC POWER INPUT.

- DUAL DISPLAY
- AUTOMATIC BUFFER CALIBRATION
- EVENT OUTPUTS STANDARD
- SIMPLE FRONT OPERATION
- SELF DIAGNOSTICS

## SPECIFICATIONS

**Input:** Glass electrode (pH) with pre-amplifier or metal electrode (ORP)

**Range:** 0.00-14.00pH or -1.500-1.500V (ORP)

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

**Output:** 4-20mA DC isolated, 2-wired, 550Ω max.

**Display:** Process variable, temperature, 4 digit, LCD

**Linearity:** ±0.03pH (±3mV) or ±0.3% whichever larger

**Repeatability:** ±0.01pH (±1mV) or ±0.1% whichever larger

**Buffer calibration:** JIS standard buffer, auto-calibration

**Error detection:** pH 0.00pH (-1.5V of ORP) and below, pH 14.0pH (1.5V of ORP) and above, temp. -25°C and below, temp. 150°C and above, electromotive force error at 7pH buffer solution and per pH, identification of error contents on the display

**Temperature compensation:** 0-100°C, Pt1000Ω at 0°C (at 25°C by manual) temperature sensor

**Temp. cable compensation:** Automatic

**Key lock:** Prevents set value from miss-resetting

**Buffer calibration:** JIS standard buffer, auto-calibration

**Output hold:** Programmable at process variable, alarm contact and error detector

**Shift readout:** 0.01pH increments within ±1.5pH



**Solution temp. compensation (option):**

0.010-0.050pH/°C for high purity water

**Operation conditions:** -10 to 60°C, 5 to 95%RH

**Power input voltage:** 24±6VDC

**Cable conduit:** G½ (PF½ female)

**Case:** Rain-proof equivalent to IP67 or NEMA4

**Case color:** Blue (Munsell 10B 5/10)

**Mounting:** 2" pipe or wall mount

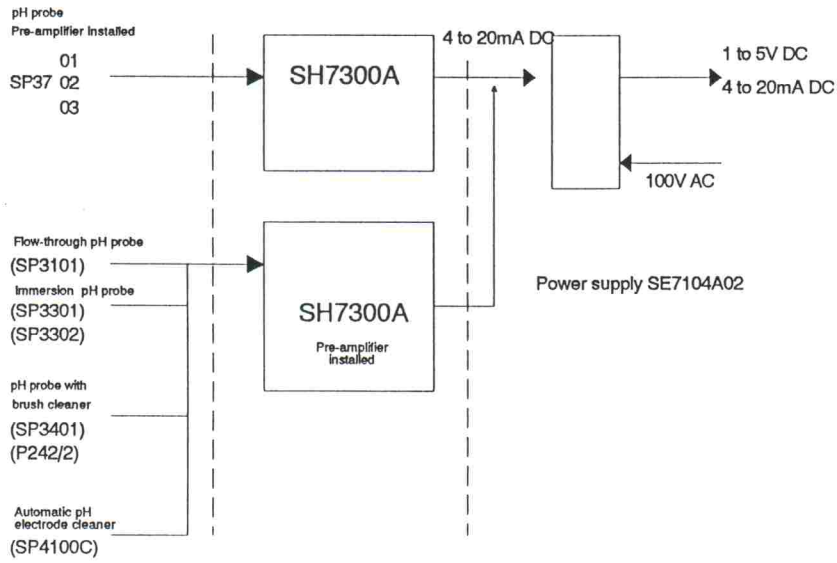
**Material:**

Case: aluminum casting

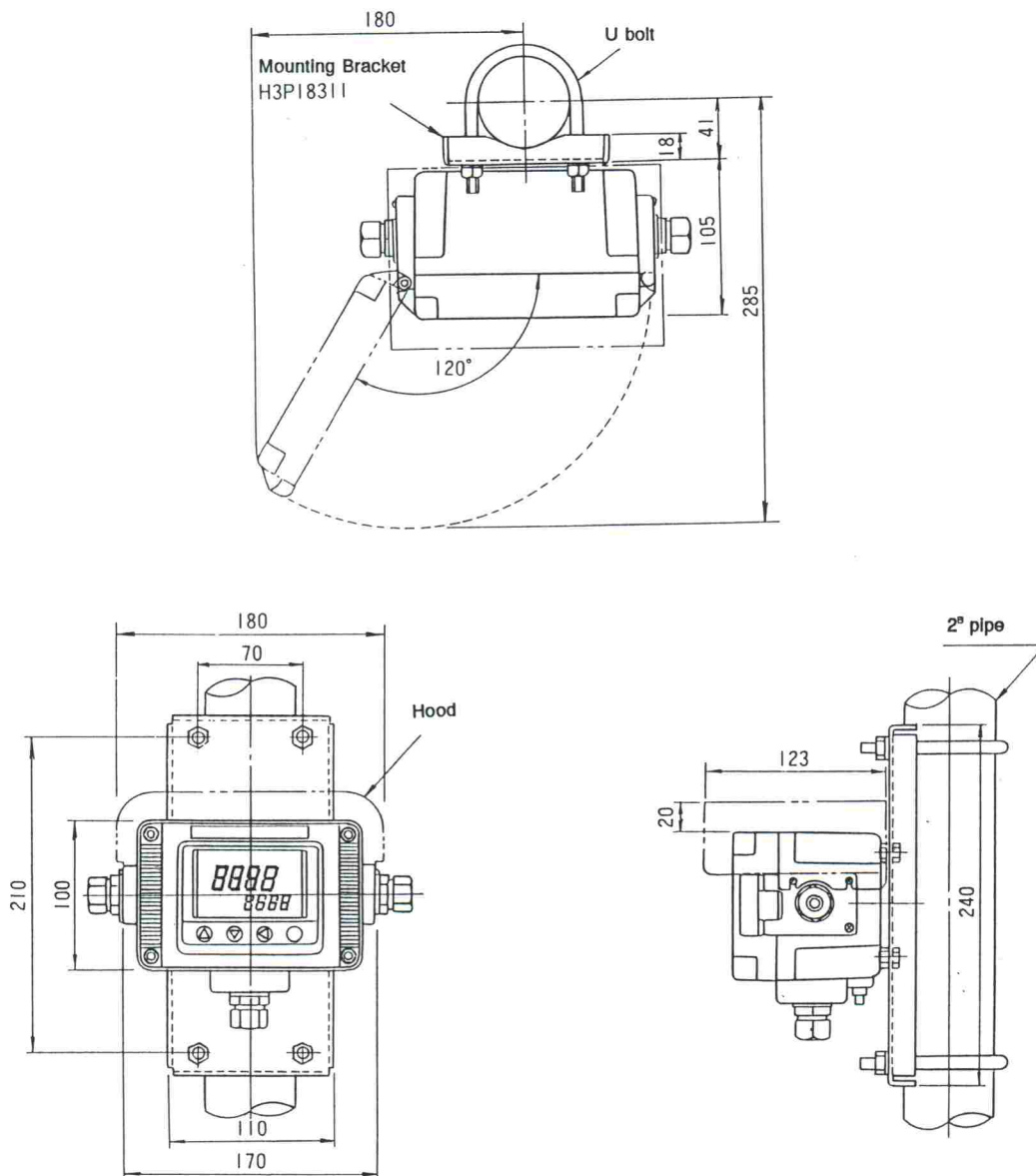
Top sheet: Polyester

**Weight:** Approx. 1.7 kg

# PROBE & TRANSMITTER CONNECTION



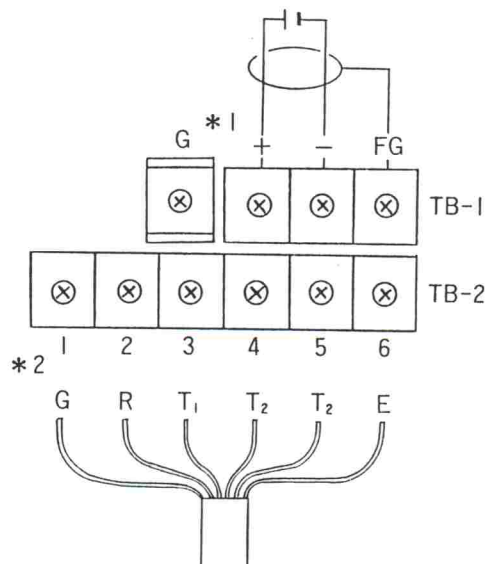
# DIMENSIONS



## MODEL CODE NUMBER

MODEL	DESCRIPTION	
SH73	Digital pH (ORP) transmitter, dual display	
	CODE	INPUT
	01A 02A 03A	Glass electrode ORP electrode pH Metal electrode (Antimony), direct connection with P242/2
	CODE	PRE-AMPLIFIER
	0 1	None Installed (Required in direct connections with P242/2, SP3101/3301/3302/3401/4100C)
	CODE	SOLUTION TEMPERATURE COMPENSATION
	00 10	None Installed
	CODE	OPTION
	N A B C	None Mounting Bracket Hood Mounting Bracket & Hood
	CODE	CUSTOM
	0 1	None Custom (Consult)

## TERMINAL ASSIGNMENT



**Note 1:** To be connected to TB-1 G in case of pre-amplifier is installed in SH7300.

**Note 2:** To be connected to TB-2 1 in case of pre-amplifier is installed in probe.