



DC DYNAMICTM
Process Equipment

Inductive Conductivity Transmitter
SmartSense CO-3002-IN-AD

Core Features of SmartSense Transmitters

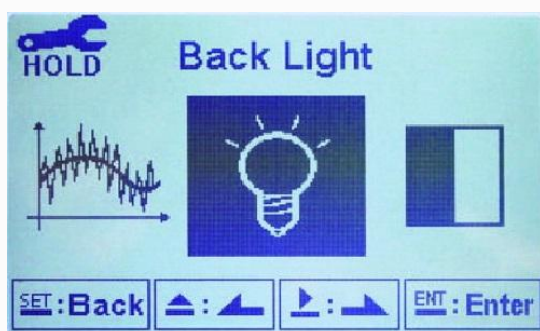
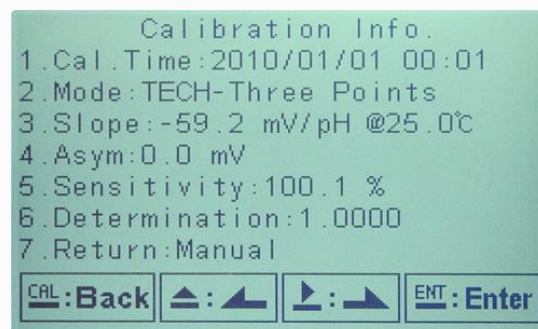


Waterproof protection

Provides the instrument safety with IP65 waterproof protection and front flap cover design for easy installation and wiring.

Dot-Matrix LCD

For convenience and better process safety, it reveals the last calibration records and a system setting overview

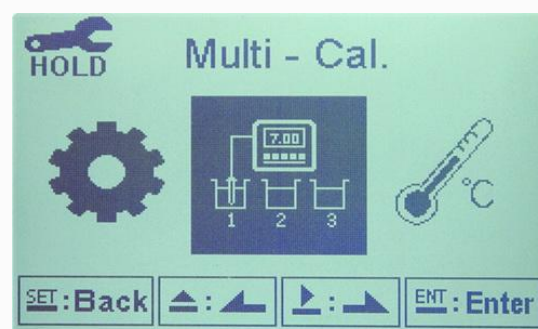


Auto-Sense Backlight Display

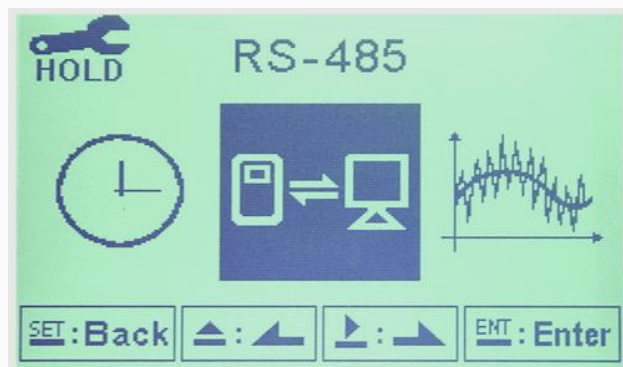
For clear reading and energy saving, it turns on the backlight automatically when the environment becomes dark.

Graphical Menu

Allows extremely intuitive & quick setting and calibration.



Special Features of Advanced Version Transmitters

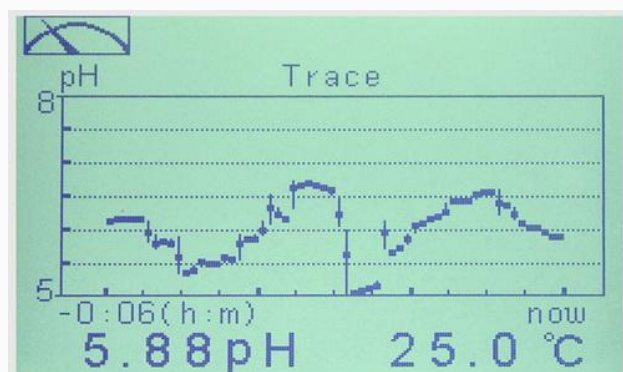
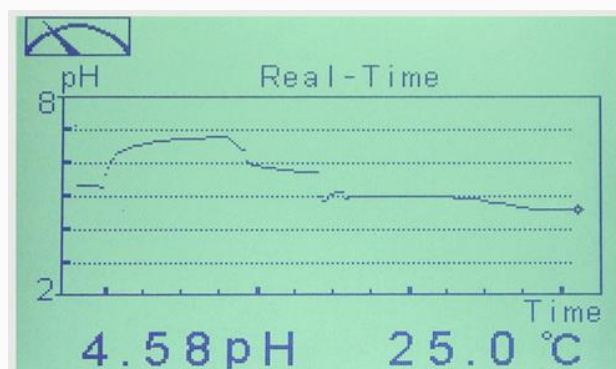


RS-485 MODBUS protocol

Provides long-distance, multiple values and configuration info transmission and anti-electrical signal protection

Real-time chart mode

3 minutes real-time dynamic graph to help you realize recent development in control



Trace mode

Set up from 3 mins to four weeks duration of the measured value trend graph to help you master the process history

Events logbook

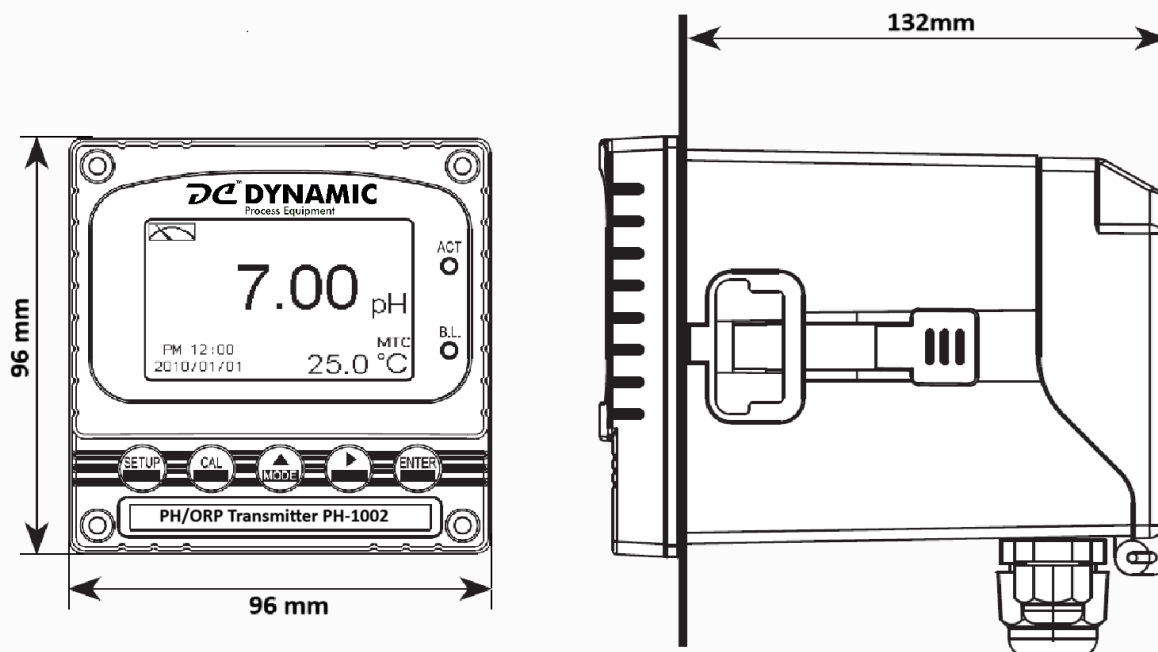
Actions, current output out of range, power outages and error records, no need for standby and record them anymore

Page 1

11/06/29	15:33:56	Set mode
11/06/29	15:33:49	Mea mode
11/06/29	15:33:47	Set mode
11/06/29	15:31:22	Mea mode
11/06/29	15:30:58	Set mode
11/06/29	15:30:26	Mea mode
11/06/29	15:29:59	Set mode

SET:Back ↑: ↓:

Transmitter Dimension DIN ¼, 96 x 96:



Flameproof Transmitter Specification:

Transmitter Type: DIN1/4 (96 x 96mm)

Flameproof protection:

EX-d AS PER IS/IEC 60079-1:2014 SUITABLE FOR INSTALLATION IN HAZARDOUS LOCATION OF GAS GROUP IIA & IIB, ZONE 1 & 2.

Ingress protection:

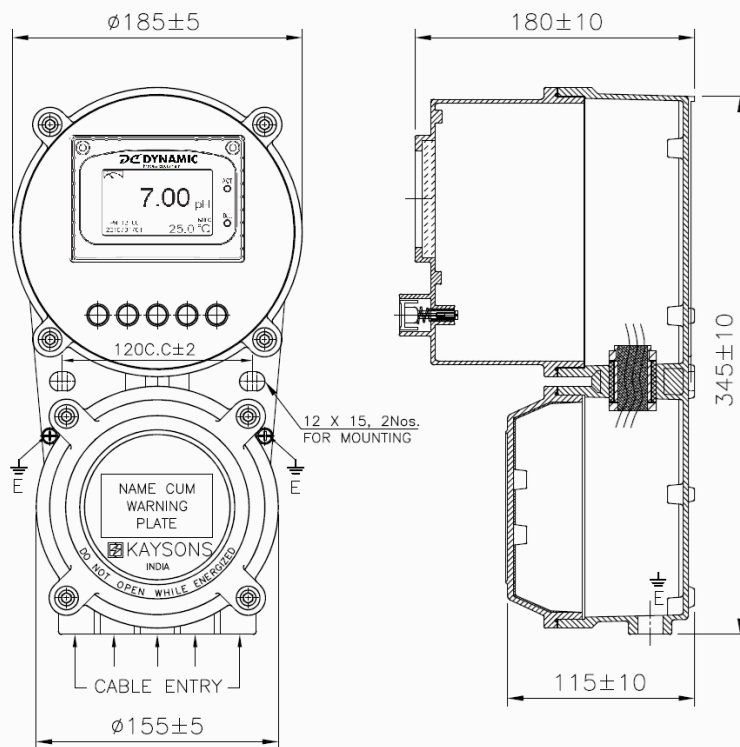
IP-66 AS PER IS/IEC 60529:2001 (REAFFIRMED 2014)

DUST IGNITION PROTECTION:

(Ex 'db' IIB Gb) (Ex tb IIIC Db) AS PER IS/IEC 60079-31:2013

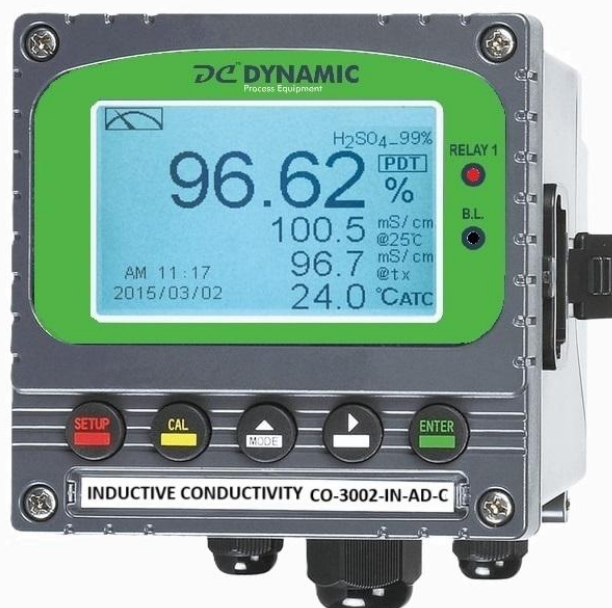
Temperature class: T6

Material of construction: DIE CAST AL. ALLOY LM-6.



SmartSense Inductive Conductivity Transmitter

CO-3002-IN-AD



The SmartSense CO-3002-IN-AD transmitter provides precise inductive conductivity measurements even in the harshest chemical conditions such as for corrosive liquids with conductivity measurement range up to 2000 mS/cm.

Applications

- Chemical Concentration
- Food and Beverages
- Industrial Process
- Scrubber
- Reagent dilution

Features

- Compatible with anti-fouling electrodeless conductivity sensor
- Conductivity ranges up to 2000 mS/cm
- User-friendly operation with text and graphic illustration, clear signs and easy to understand
- Chart mode, Trace Mode for graphical data interpretation
- RS-485 MODBUS RTU Digital Output
- Hi/Lo, Hi/Hi, Lo/Lo selectable two limited contact outputs with programmable set-points and hysteresis
- With conductivity, Salinity and TDS measurement available.
- In built temperature compensation
- LED indicated alarm or washing status signal
- Waterproof and dustproof design IP 65 (NEMA 4X)

Specification:

Inductive Conductivity Transmitter SmartSense CO-3002-IN-AD		
Model		CO-3002-IN-AD
Measuring Modes		Conductivity / TDS / Salinity / Temp
Measurement Range	Conductivity	0.0 μ S/cm to 2000 mS/cm (depends on selected range); Auto or Fixed ≥ 1 mS/cm: $\pm 1\%$ (± 1 Digit), < 1 mS/cm: ± 10 μ S/cm
	Salinity	0.0 to 70.0 ppt, $\pm 1\%$ (± 1 Digit)
	TDS	0 to 19999 ppm ; 0.00 to 199.99 ppt
	Temperature	Pt-1000: -30.0 to 200.0°C, NTC - 30K: -30.0 to 130.0°C $\pm 0.2^\circ\text{C}$ (± 1 Digit)
Temperature Compensation		Automatic with Pt-1000 or NTC 30K Or Manual Input
Temperature Coefficient		Linear temperature compensation at 0.00% to 40.00%, Non-linear compensation and Off-compensation
Cell Constant		Freely adjustable 0.008 to 9.9999 cm^{-1}
Production Adjustment		Factor: 0.7000 to 1.3000
Display		LCD with auto/manual illumination function, Text, Chart, Trace mode
Analog Output		Isolated DC 0/4 to 20 mA corresponding to measurement, max load 500 Ω
Serial Communication		RS-485 (MODBUS RTU or ASCII)
Calibration		Manual cell-constant adjustment / Conductivity standard solution calibration / Zero-point calibration
Event Log		Last 50 Events
Output Relay	Rating	240 VAC, 0.5A max. (recommended)
	Set Point	Hi/Lo, Hi/Hi, Lo/Lo selectable two limited programmable, ON/OFF
Wash Relay	Rating	240 VAC, 0.5A max. (recommended)
	Time	On: 0-99min. 59sec, Off: 0-999hr 59min.
Ambient Temperature		0 to 50°C
Storage Temperature		-20 to 70°C
Power Supply		100V to 240V AC $\pm 10\%$, 50/60Hz, 8W Max.
Installation		Wall mounting, Pipe mounting, Panel mounting
Dimensions	Enclosure	H: 96 mm W: 96mm D:132 mm (1/4 DIN)
	Panel Cut out	93 mm x 93 mm
Weight		~ 500 Grams
Protection		IP 65 (NEMA 4X), Flameproof (Optional)

Also check out our range of **Retractable Housings** for Liquid Analytics...



SmartDip 405M

SmartDip 405M is a retractable electrode housing with pneumatically operated drive Unit. This metal body model can be implemented in harsh chemical applications through flan...



SmartDip 220M

SmartDip 220M is a compact retractable electrode housing with manual drive Unit. This metal body model can be implemented in different chemical applications including ferment...



SmartDip 405P

SmartDip 405P is a retractable electrode housing with pneumatically operated drive Unit. This plastic body model can be implemented in harsh chemical applications through flan...



SmartDip 250M

SmartDip 250M is a manually operated Retractable electrode housing with long Immersion lengths and ball valve for isolation. It can fit 120mm long Sensor.



SmartDip 420M

SmartDip 420M is a compact retractable electrode housing with pneumatically operated drive Unit. This metal body model can be implemented in different chemical applicatio...



SmartDip 240M

SmartDip 240M is a compact retractable electrode housing. This version can fit 120mm long sensor. It comes with 1" NPT, Triclover connection.



SmartDip 450M

SmartDip 450M is a pneumatically operated retractable electrode housing with long immersion length and isolation ball valve. This unique model can fit 120mm long sensor.