

4.01

SUNTEX

SUNTEX INSTRUMENTS

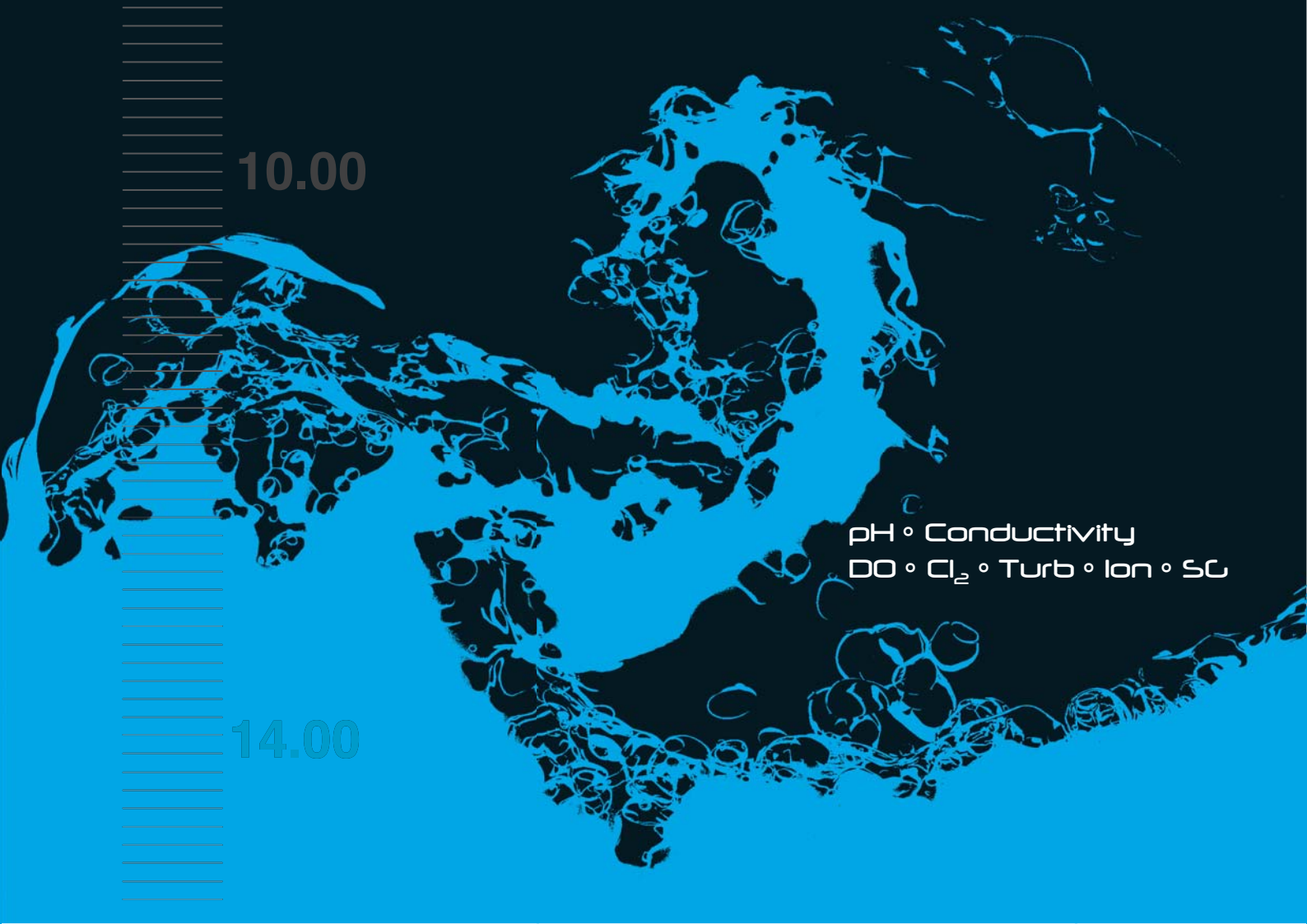
Online Measurement & Control

7.00

10.00

14.00

pH ° Conductivity
DO ° Cl₂ ° Turb ° Ion ° SG



About Suntex

Suntex Instruments Co., Ltd. established in 1982 in Taiwan, has gained prestige and trust from our customers for dedication of providing professional, high-quality water analysis products and satisfying customer service.



30 Years Quality Solution & Service

Online Measurement and Control

Through 30 years experience and innovation, Suntex has launched its fifth generation transmitter. We called it intelligent transmitter series. The intelligent transmitter series includes pH/ORP, Conductivity/Resistivity, Dissolved Oxygen, Residual Chlorine, Turbidity, Ion and Specific Gravity models for water treatment & process. The intelligent transmitter features 1/4 DIN or 1/2 DIN housing with IP65 protection, graphical menu, last calibration and overview of setting at a glance, and auto-sense backlight display, etc. There are also RS-485 Modbus models and PID controlling models to satisfy various demands. All of them are the proof of our continuous research and development to make the online measurement and controlling easier and more reliable.



Portable and Laboratory Instruments

The accuracy and reliability of the Suntex portable and Laboratory instruments are guaranteed by the online measurement experience. Suntex provides a variety of pH/ORP, Conductivity/Resistivity/TDS/Salinity portable and benchtop meters to universities, research centers, environment inspection labs, and applications of various industries. There are also Colony Counter, COD Thermoreactor, Hotplate & Stirrer, and Automatic Waterstill for most of general laboratories usage.



ISO 9001:2008 Certified

Suntex has been certified by TÜV SÜD Management Service GmbH, Germany, since 2001 for Distribution of Instruments & Equipment, and Development and Production of Meters & Transmitters.



www.suntex.com.tw/en
— Visit for more information



Wastewater



PC-3310



Pure water



EC-430/410



Industrial Process



SG-2110-RS



Cooling water / Raw water/ Recycled water / Scrubber



CT-6110-POL

Application table for parameters of SUNTEX online transmitters

	pH/ORP	Cond/Res	D.O.	Cl ₂	Turb/S.S	ION	S.G.
Wastewater	⊙	⊙	⊙		⊙	⊙	
Pure water	⊙	⊙		⊙			
Raw water	⊙	⊙		⊙	⊙		
Cooling water	⊙	⊙		⊙	⊙		
Recycled water	⊙	⊙		⊙			
Scrubber	⊙	⊙					⊙
Process cleaning		⊙					
Electroplating	⊙	⊙					⊙
Etching	⊙	⊙					⊙
Surface water	⊙	⊙	⊙		⊙		
Fish farm	⊙	⊙	⊙				
Drinking water	⊙	⊙	⊙	⊙			
Swimming Pool	⊙			⊙			

Transmitters and Parameters

Complete models and parameters for all water treatment applications

Intelligent Transmitters
96x96mm, IP 65

pH/ORP Cond./Res. Dissolved Oxygen
Chlorine Specific Gravity

Extremely advanced operation



Intelligent Transmitters
144x144mm, IP 65

pH/ORP Cond./Res. Dissolved Oxygen
Chlorine Turb./S.S. Ion

*Extremely advanced operation & protection
with various parameters*

Microprocessor Water Quality Monitors
48x96mm

pH/ORP Cond./Res.

Compact & pragmatic

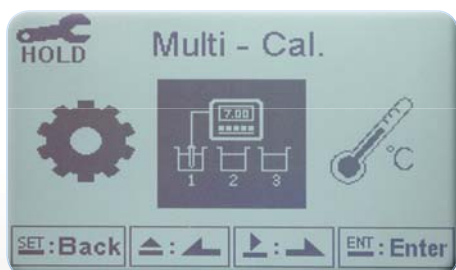


Classic Transmitters
144x144mm, IP 65

pH/ORP

Easy tuning calibration

All New Suntex Intelligent Transmitters



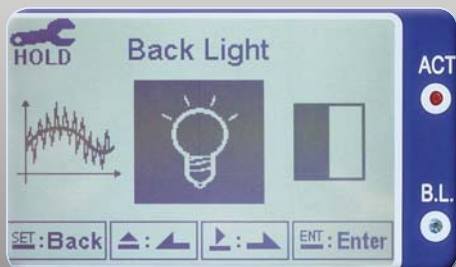
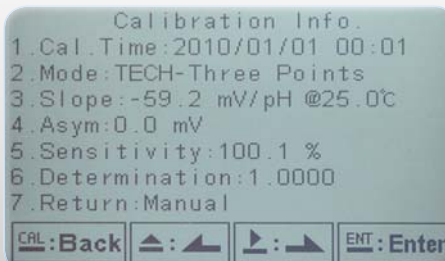
Graphical Menu

Allows extremely intuitive & quick setting and calibration

Dot-Matrix LCD---

Reveals last calibration records and system setting overview

For convenience and better process safety



Auto-Sense Backlight Display

Auto turn on the backlight when the environment become dark, for clear reading and energy saving

IP65 waterproof protection

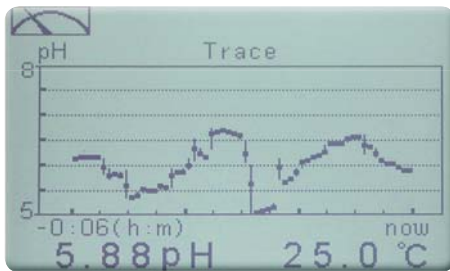
Provides instrument safety protection



Suntex RS Intelligence Advanced Transmitters



Intelligent Value-Added Features



Trace mode

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

1

Real-time chart mode

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

2



RS-485 MODBUS protocol

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

3



Events logbook

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

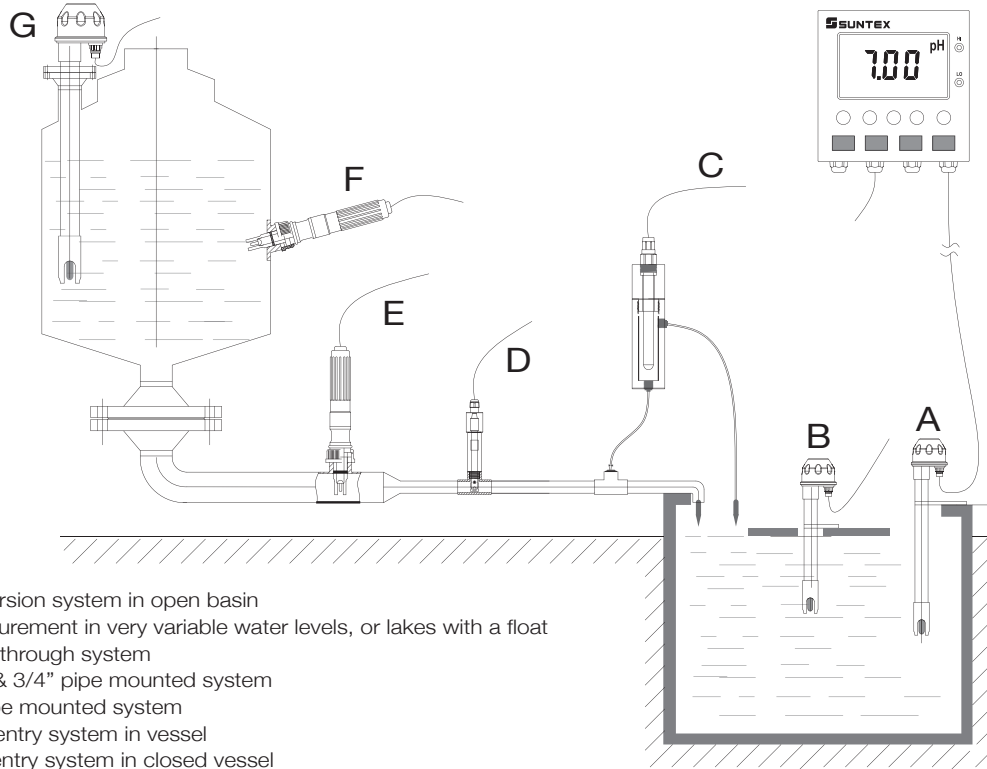
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Page 1

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

Navigation buttons: SET:Back, up/down arrows, ENT:Enter

How to build a pH Measurement System



- A Immersion system in open basin
- B Measurement in very variable water levels, or lakes with a float
- C Flow-through system
- D 1/2" & 3/4" pipe mounted system
- E 1" pipe mounted system
- F Side-entry system in vessel
- G Top-entry system in closed vessel

There are four major elements to make a complete measurement system.

1. Transmitter: to translate the sensor's reading into a displayed measurement and transfer the data to the process control system



3. Cable: to transmit the signal between a sensor and a transmitter



2. Sensor: directly mounted in the field to measure solutions



4. Sensor Housing: to hold the sensor, protect the sensor in the measurement solutions, and to connect to the extension cable



Intelligent pH/ORP Transmitters

PC-3110 Series



Calibration Info.	
1	Cal Time 2010/01/01 00:01
2	Mode: TECH-Three Points
3	Slope -59.2 mV/pH @25.0°C
4	Asym: 0.0 mV
5	Sensitivity: 100.1%
6	Determination: 1.0000
7	Return: Manual

Calibration Info.			
Point	Buf (pH)	Vol (mV)	Temp (°C)
1	4.01	177	25.0
2	7.00	-0	25.0
3	10.00	-176	25.0

Multi-Cal.	
1	4.01
2	7.00
3	10.00

Overview	
1	Mode: pH
2	Temp: MTC, Setting: 25.0°C
3	Rel1: Hi, SP 10.00pH, DB: 0.10pH
4	Rel2: Lo, SP 4.00pH, DB: 0.10pH
5	Cl: OFF
6	pH mA: 4-20mA, 2.00pH, 12.00pH
7	Temp mA: 4-20mA, 0.0°C, 100.0°C

Applications:

- Industrial Process
- Chemical Process
- Water & Wastewater Treatment
- Biochemistry
- Scrubber
- Recycling
- Environmental protection

Features:

- 96 x 96mm Intelligent pH/ORP Transmitter
- Waterproof and dustproof design
- Solution-ground design eliminating interference of ground potential
- LCM graphic display with auto-sense backlight and contrast setting function
- User-friendly operation with text and graphic illustration, clear signs and easy to understand
- Multi-Cal calibration, Tech. and NIST buffer automatic recognition
- Max. 3-point calibration and the calibration line calculated by linear regression, the last calibration data displayable
- Product adjustment function allows online calibration
- With password and multi-key design-security protection enhancement
- Automatic temperature compensation, NTC30K or PT 1000 selectable
- Two sets of isolated current output at DC 0/4~20mA, max. load 500Ω
- Hi/Lo, Hi/Hi, Lo/Lo selectable two limited contact outputs with programmable set-points and hysteresis
- Gradually continuous sample measurements average function to enhance stability
- Automatic sensor clean function with programmable time interval
- LED indicated alarm or washing status signal
- IP 65 (NEMA 4X), CE approved

PC-3110-RS / PC-3110-RS-P only:

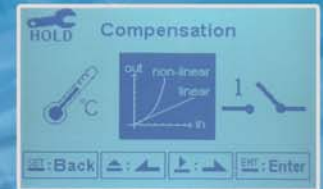
- Measured values can be selected for figure or chart display
- Trace mode can display historical measured value curve from 3-minute to 4-week program
- Equipped with events logbook function
- Max. 5-point calibration, with customer definition buffer setting and calibration curve, which can be displayed
- Equipped with one analog output and RS-485 interface

PC-3110-P / PC-3110-RS-P only:

- Equipped with PID control function to maximize the stability of process

Intelligent Conductivity Transmitters

EC-4110 Series



Applications:

- RO System
- Cooling water
- Industrial process
- Pure water
- Boiler water
- Water treatment

Features:

- 96 x 96mm Intelligent conductivity/resistivity transmitter
- Waterproof and dustproof design
- Compatible with conductivity or resistivity measurement
- Compatible with 2- or 4-electrode conductivity cell
- User-friendly operation with text and graphic illustrations, clear signs and easy to understand
- LCM graphic display with auto-sense backlight and contrast setting function
- With password and multi-key design-security protection enhancement
- Automatic temperature compensation with NTC30K or PT1000
- Fine tuning of product adjustment function ensures high accuracy
- Temperature coefficient compensation by non-linear or linear
- Two sets of isolated current output at DC 0/4~20mA, max. load 500Ω
- Hi/Lo, Hi/Hi, Lo/Lo selectable two limited contact outputs with programmable set-points and hysteresis
- Gradually continuous sample measurements average function to enhance stability
- Automatic sensor clean function with programmable time interval
- LED indicated alarm or washing status signal
- IP 65 (NEMA 4X), CE approved

EC-4110-RS only:

- Measured values can be selected for figure or chart display
- Trace mode can display historical measured value curve from 3-minute to 4-week program
- Equipped with events logbook function
- Equipped with one analog output and RS-485 interface



2-Electrode



4-Electrode

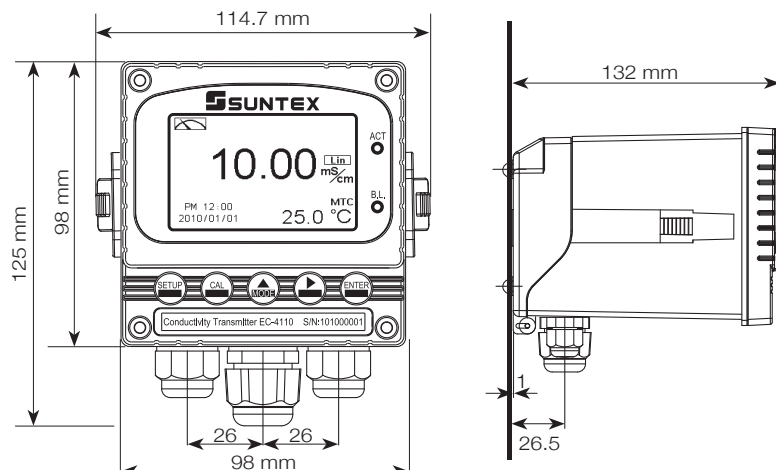
Specifications:

Model		EC-4110	EC-4110-RS
Measuring modes		Conductivity / Resistivity / Temp.	
Range	Conductivity	0.00 μ S/cm~200.0 mS/cm in 5 ranges; Auto or Fixed	
	Resistivity	0.00~20.00 M Ω ·cm	
	Temp.	-30.0~130.0°C	
Resolution	Conductivity	0.01 / 0.1 / 1 μ S/cm, 0.01 / 0.1 mS/cm	
	Resistivity	0.01 M Ω ·cm	
	Temp.	0.1°C	
Accuracy	Conductivity	\pm 1% (\pm 1 Digit)	
	Resistivity	\pm 1% (\pm 1 Digit)	
	Temp.	\pm 0.2°C (\pm 1 Digit) with temperature error correction function	
Cell constant		0.01, 0.05, 0.1, 0.5, 10.0 cm ⁻¹ fixed, freely selectable 0.008~19.99 cm ⁻¹	
Calibration		Automatic with three kinds of built-in standard solutions	
		Manual cell-constant adjustment	
Temperature compensation		Automatic with NTC 30K / Pt-1000 or manual adjustment	
Temperature coefficient		Linear compensation at 0.00%~40.00%	
		Non-linear compensation for natural water	
Ambient temperature		0~50°C	
Storage temperature		-20~70°C	
Display		LCM (graphic display) with auto-sense backlight and contrast function	
		Text mode	Text, Chart or Trace mode
Analog output 1		Isolated DC 0/4~20mA corresponding to measuring range, max. 500 Ω	
Analog output 2		Isolated DC 0/4~20mA corresponding to temperature, max. 500 Ω	-
Serial interface		-	RS-485 (MODBUS RTU or ASCII)
Logbook		-	50 event records
Setting	Contact	240VAC, 0.5A max. (recommended)	
	Activate	Hi/Lo, Hi/Hi, Lo/Lo selectable two limited programmable, ON/OFF	
Wash	Contact	240VAC, 0.5A max. (recommended)	
	Activate	ON: 0~99 min. 59 sec. OFF: 0~999 hours 59 min.	
Power supply		100~240 VAC \pm 10%, 50~60 Hz, 7W Max.	
Installation		Wall or pipe or panel mounting	
Dimensions		96 mm x 96 mm x 132 mm (H x W x D), 1/4 DIN	
Cut out dimensions		93 mm x 93 mm (H x W)	
Weight		0.5 Kg	
Protection		IP 65 (NEMA 4X)	

What's included? 2 Panel Mounting clips, Precision driver for wiring

Optional accessories:

- 2-electrode conductivity cell
- 4-electrode conductivity cell
- Resistivity cell, 0.01/0.05/0.1
- Specific cable 5M, 10M, 20M, 30M or other length upon request
- Standard solution, 84/1413 μ S/cm and 12.88mS/cm
- Flow through tees
- Bypass chamber
- Sun shield & adapter kit
- Immersion sensor holder 1M, 2M, and 3M
- L shaped sensor holder support base



EC-4110-ICON Inductive Conductivity Transmitter

Precision even in the harshest conditions

The EC-4110-ICON transmitter provides precise inductive conductivity measurements even in the harshest chemical conditions with chemical concentration curves, or a self-defined conversion table. Built-in product adjustment function allows fine-tuning for concentration values to minimize process contamination caused deviations. Users can even utilize MODBUS digital communication to remotely change concentration curves. The EC-4110-I is an inductive conductivity transmitter without concentration mode.



Applications:

- ♣ Chemical concentration
- ♣ Reagent dilution
- ♣ Chemical recycling
- ♣ Food & Beverage CIP
- ♣ Scrubber/Cooling water
- ♣ Salinity Adjustment/Desalination

Features:

- ♣ Compatible with anti-fouling electrodeless conductivity sensor
- ♣ Conductivity range up to 2000 mS/cm
- ♣ EC-4110-ICON with built-in concentration curves and a self-defined table function
- ♣ EC-4110-ICON simultaneously display concentration, compensated conductivity and absolute conductivity values
- ♣ EC-4110-I with conductivity, salinity and TDS measurement
- ♣ Password protection

Model		EC-4110-I	EC-4110-ICON
Measuring modes		Conductivity / TDS / Salinity /Temp. / Concentration (EC-4110-ICON Only)	
Measuring range	Conductivity	0.0 μ S/cm~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 ppt~70.0 ppt	
	TDS	0 ppm ~ 19999 ppm ; 0.00~199.9 ppt	
	Temperature	PT-1000: -30.0~200.0°C; NTC-30K: -30.0~130.0°C, (Depends on the sensor), $\pm 0.2^\circ\text{C}$ (± 1 Digit) with temp. error correction function	
	Concentration	-	(Range incl. different temp. condition; Resolution 0.01%) NaCl_28%: 0~28.% HCl_39%: 22~39% HCl_18%: 0~18% HNO ₃ _30%: 35~96% HNO ₃ _30%: 0~30% NaOH_50%: 15~50% NaOH_24%: 0~24% H ₂ SO ₄ _88%: 28~88%, H ₂ SO ₄ _37%: 0~37% H ₂ SO ₄ _99%: 89~99% H ₂ SO ₄ _99%: 89~99% H ₃ PO ₄ _35%: 0~35% User-Defined Concentration Table(9 temp. x 9 Con./Cond. matrix);
Temperature compensation		Pt-1000 or NTC 30K automatic compensation Manual temp. compensation, and can display non-compensated conductivity value	
Calibration mode		(1) Manual cell-constant adjustment (2) Conductivity standard solution calibration (3)Zero-point calibration	
Cell constant		Freely adjustable 0.008~9.9999 cm^{-1}	
Production adjustment		Factor: 0.7000~1.3000	
Temperature coefficient		Linear temperature compensation at 0.00%~40.00%, Non-linear compensation and Off-compensation	
Compensated Temperature Display		0~200°C, Freely adjustable & setting of the temp. value to be compensated at LCM (graphic display) with auto/manual illumination function, Text, Chart, Trace mode	
Calibration mode		One point or two points calibration	
Analog output		Isolated DC 0/4~20 mA corresponding to measurement, max load 500 Ω	
Serial interface		RS-485 (MODBUS RTU or ASCII)	
Event logbook		50 event records	
Set point	Contact	240 VAC, 0.5A max. (recommended)	
	Activate	Hi/Lo, Hi/Hi, Lo/Lo selectable two limited programmable, ON/OFF	
Wash	Contact	240 VAC, 0.5A max. (recommended)	
	Time	On: 0~99min. 59sec, Off: 0~999hr 59min.	
Ambient temperature		0~50°C	
Storage temperature		-20~70°C	
Power supply		100~240 VAC $\pm 10\%$, 50~60 Hz, 7W Max.	
Installation		Wall mounting, Pipe mounting, Panel mounting	
Dimensions		96 mm x 96 mm x 132 mm (H x W x D), 1/4 DIN	
Cut off dimensions		93 mm x 93 mm (H x W)	
Weight		0.5 kg	
Protection		IP 65 (NEMA 4X)	

What's included? 2 panel mounting clips

DC-5110 Series Dissolved Oxygen Transmitter

Reliable and sophisticated

The DC-5110 series transmitter provides compatibility to pre-amplified sensor and polarographic D.O. sensor in a 1/4DIN size housing. The graphical menu driven operation with setting and calibration information in full text pages provide the extreme ease of use in all functions. The DC-5110-RS integrates the advantage of RS model features including graphical trace curve, events logbook and RS-485 interface.



Applications:

- 💧 Wastewater aeration
- 💧 Environment
- 💧 Fish farming
- 💧 Fermentation

Features:

- 💧 Compatible with WTW pre-amplifier 690 sensor
- 💧 Compatible with polarographic analog sensors
- 💧 IP 65 waterproof and dustproof design
- 💧 Back-lit LCM display with graphical menu
- 💧 DC-5110 series with setting & last cal. info overview
- 💧 DC-5110-RS with Text, Chart, and Trace mode display
- 💧 Sensor slope status indicator for pre-amplifier sensor
- 💧 Salinity correction & atmospheric pressure correction
- 💧 Password protection

Model		DC-5110	DC-5110-RS
Measuring range	%Saturation	0.0 ~ 600.0%, (Depends on the sensor), $\pm 0.5\%$ of reading (± 1 Digit)	
	mg/l, ppm	0.00~60.00 mg/l (ppm), (Depends on the sensor), $\pm 0.5\%$ of reading (± 1 Digit)	
	Temperature	0.0~140.0°C, (Depends on the sensor), $\pm 0.2^\circ\text{C}$ (± 1 Digit) with temp. error correction function	
Temperature compensation		NTC 30K or NTC 22K automatic compensation or manual adjustment	
Salinity correction		0.0 ~ 45.0 ppt	
Pressure correction		0.500 ~ 2.500 bar or 7.25 ~ 36.25 psi manual adjustment	
		500~2500mmHg manual adjustment	
Display		LCM(graphic display) with auto-sense backlight and contrast function	
		Text mode	Text, Chart or Trace mode
Calibration mode		One point or two points calibration	
Analog output		Isolated DC 0/4~20 mA corresponding to measurement, max load 500 Ω	
Temp. output		DC 0/4~20 mA	-
Serial interface		-	RS-485
Event logbook		-	50 event records
Set point	Contact	240 VAC, 0.5A max. (recommended)	
	Activate	Hi/Lo, Hi/Hi, Lo/Lo selectable two limited programmable, ON/OFF	
Wash	Contact	240 VAC, 0.5A max. (recommended)	
	Time	On: 0~99min. 59sec, Off: 0~999hr 59min.	
Ambient temperature		0~50°C	
Storage temperature		-20~70°C	
Voltage output		DC $\pm 8\text{V}$, Max 0.5W	
Power supply		100~240 VAC $\pm 10\%$, 50~60 Hz, 8W Max.	
Installation		Wall mounting, Pipe mounting, Panel mounting	
Dimensions		96 mm x 96 mm x 132 mm (H x W x D), 1/4 DIN	
Cut off dimensions		93 mm x 93 mm (H x W)	
Weight		0.5 kg	
Protection		IP 65 (NEMA 4X)	

What's included? 2 panel mounting clips, Plastic L-shaped electrode holder support base

CT-6110-POL Residual Chlorine/pH Analyzer

Extremely low maintenance & high stability

The CT-6110-POL is an outstanding free chlorine & pH dual channel analyzer. Its rotating electrode design provides unique performance which not only reduces maintenance & consumable costs as the traditional membrane type sensors have, but also provides high measurement stability without need of electrolyte. This technology guarantees the best possible measurement performance in sanitary process.

Applications:

- ◆ Raw water sanitary
- ◆ Dechlorination
- ◆ Cooling water
- ◆ Drinking water
- ◆ Swimming pool

Features:

- ◆ Non-reagent type free available chlorine & pH dual-channel analyzer
- ◆ Non-membrane type Cl_2 sensor reduces operation costs
- ◆ Motor-driven, self-cleaning electrode ensures measurement reliability
- ◆ Auto/Manual pH compensation for less limitation
- ◆ Individual 2 limited ON/OFF relays for Cl_2 /pH
- ◆ Water outage diagnostic function automatically holds operation
- ◆ Easy sensor box removing design facilitates maintenance work
- ◆ Polarogram scanning verifies initial voltage for demanding application



At maintenance position

Model		CT-6110-POL		
Measuring range	Chlorine	0.00~3.00mg/l (ppm), (highest measurement up to 5 mg/l) (Free Cl_2 corresponding range adjustable for graphical display)		
	pH	-2.00~16.00pH (with an optional pH sensor set)		
	Temperature	0.0~60.0°C, $\pm 0.2^\circ C$ (± 1 Digit) with temp. error correction function		
pH compensation		pH sensor auto compensation/ manual compensation/ OFF / ± 0.01 pH (± 1 Digit)		
Temperature compensation		NTC 30K (compensation range: 0~45°C) / $\pm 0.2^\circ C$ (± 1 Digit)		
Display		LCM (graphic display) with auto/manual illumination function, Trace mode, Chart mode		
Analog outputs		Two isolated DC 0/4~20 mA corresponding to Cl_2 (1), pH or temp.(2), max load 500 Ω		
Serial interface		RS-485 (MODBUS RTU or MODBUS ASCII)		
Set point	Contact	240 VAC, 0.5A max. (recommended)		
	Activate	Two individual Free Cl_2 or pH, Hi/Lo selectable, limited programmable		
Clean/Auto Zero		Contact output, On: 0~99 min. 59 sec, Off: 0~999 hr 59 min		
Ambient temperature		0~50°C; Storage temperature: -20~70°C		
Measuring principle		Polarographic (no reagent needed for measurement)		
Cl_2 electrode		2 in 1 rotating electrode (Indicator electrode: gold; Counter electrode: silver)		
Accuracy/Repeatability		$\pm 2\%$ Full Scale / $\pm 2\%$ Full Scale		
Response time		<60 sec for 0~2mg/l, or < 90 sec for 2~3mg/l (90% response time)		
pH electrode		Optional (no need for pH compensation as pH ranges within pH 6.5~7.5)		
Cl_2 electrode cleaning		With Ceramic beads offering automatic cleaning		
Water outage diagnosis		Auto motor shut-down and hold the control and output		
Motor protection		Auto motor shut-down against overheating		
Flow-chamber connection		Inlet: 3/8"(ID); Drain: 3/8"(ID)		
Sample condition		Temp.:0~50°C, Inlet flow 0.1~2 L/min (no overflow as the criteria) pH 5~9 with optional pH sensor for automatic compensation, or pH 6.5~7.5 Conductivity: 100~500 $\mu S/cm$ (depends on sample quality); S.S.: ≤ 10 mg/L		
Power supply		CT-6110-POL-01: AC 220V(-15~+10%) / 60Hz	CT-6110-POL-02: AC 220V(-15~+10%) / 50Hz	CT-6110-POL-03: AC 110V(-15~+10%) / 60Hz
Power		Approx. 35W		
Installation		Wall mounting		
System dimensions		~316 mm x 301 mm x 211 mm (H x W x D)		
System weight		Approx. 4.0 kg		

What's included? Transmitter, Sensor assembly box(Cl_2 sensor, temp. sensor, motor & driving device), Flow-through chamber, Wall mounting frame, Ceramic beads pack x 2, Cl_2 sensor measuring cup, Inlet/Outlet couplings

Optional: pH electrode, pH electrode housing, motor shield cover

SG-2110-RS Specific Gravity Transmitter

Real-time measurement meets best performance

The SG-2110-RS is an accurate, reliable, online, real-time specific gravity instrument suitable for demanding process applications. Its unique load cell technology provides long-term reliability for SG measurement. The advanced transmitter is able to convert the SG reading to concentration, baumé and salinity, and provides the highest level of user-friendly operation.

Applications:

- ◆ Electroplating
- ◆ Etching
- ◆ Scrubber
- ◆ Electrolyte concentration
- ◆ Surface treatment
- ◆ Antifreeze

Features:

- ◆ Specific gravity/Baumé/Salinity/Concentration transmitter
- ◆ Real-time online SG measurement optimizes production efficiency
- ◆ Long-term reliability and accuracy by load cell technology
- ◆ Convenient calibration with low maintenance
- ◆ Trace mode history curve display and events logbook function
- ◆ SG/Concentration conversion table
- ◆ Two limited ON/OFF contact output
- ◆ Password protection



Model		SG-2110-RS
Measuring modes		Specific Gravity / Baumé / Salinity / Concentration / Temperature
Measuring range	SG	0.000~2.200 SG (with standard plummet), ±0.002(±1 Digit)
	Temperature	-30~130°C, ±0.2°C (±1 Digit) with temp. error correction function
Unit conversion		Built-in SG value converts to Baumé (°Bé) or Salinity(ppt) or Concentration(%) value
Concentration table setting		Changeable SG/Concentration table (Up to 10 points)
Temperature compensation		Manual or automatic temperature compensation, SG value temperature compensation at 20°C
SG temperature coefficient		SG coefficient of linear temperature compensation
Calibration mode		Zero point calibration and Span calibration (For both volume and weight of plummet)
Plummet constant		Settable plummet constant (1~99999)
Display		LCM (graphic display) with auto/manual illumination function, Trace mode, Chart
Analog outputs		Isolated DC 0/4~20 mA corresponding to measurement, max. load 500Ω
Serial interface		RS-485 (MODBUS RTU or MODBUS ASCII)
Event logbook		50 event records
Set point	Contact	240 VAC, 0.5A max. (recommended)
	Activate	Hi/Lo, Hi/Hi, Lo/Lo selectable two limited programmable, ON/OFF
Ambient temperature		0~50°C
Storage temperature		-20~70°C
Power Supply		100 ~ 240 VAC ±10%, 50~60 Hz, 6W Max.
Installation		Transmitter: Wall or Pipe or Panel mounting SG Sensor: According to field conditions for user self-installation
Dimensions		Transmitter: 96 mm x 96 mm x 132 mm (H x W x D)
Cut off dimensions		Transmitter: 93 mm x 93 mm (H x W)
Weight		Transmitter: 0.5Kg, SG Sensor: 0.7kg
Protection		Transmitter: IP 65 (NEMA 4X)

What's included? Transmitter, SG load cell sensor, SG plummet, Tie line, SG sensor platform, 2 Panel mounting clips
Optional: Sensor cable 5m, 10m, 20m, 30m, 50m, Temperature probe, Teflon coating plummet

PC-3310 Series pH/ORP Transmitter

Intelligent feature with robust protection

The PC-3310 series pH/ORP transmitter has rugged IP 65 enclosure and outstanding EMC protection ability. The graphical menu driven operation with setting and calibration information in full text pages provide the extremely ease of use in all functions. The PC-3310 series integrates the advantage of Suntex intelligent transmitter's fine operation feature with the consistent reliability.

Applications:

- 💧 Water treatment
- 💧 Chemical process
- 💧 Biochemical process
- 💧 Wastewater treatment
- 💧 Reclaimed water
- 💧 Scrubber

Features:

- 💧 pH / ORP, Temperature measurement
- 💧 IP 65 waterproof and dustproof design
- 💧 Back-lit LCM display with graphical menu
- 💧 PC-3310 series with setting & last cal. info overview
- 💧 PC-3310-RS with Text, Chart, and Trace mode display
- 💧 Two limited ON/OFF contact output
- 💧 Wash function with programmable time-interval control
- 💧 Password protection



Model		PC-3310	PC-3310-RS
Measuring range	pH	-2.00 ~ 16.00 pH, ±0.01 (±1 Digit)	
	ORP	-1999 ~ 1999 mV, ±0.1%(±1 Digit)	
	Temperature	-30.0~130.0°C, ±0.2°C (±1 Digit) with temp. error correction function	
Temperature compensation		Automatic with Pt-1000 or NTC 30K or manual adjustment	
Input impedance		> 10 ¹² Ω	
Display	Large LCM (graphic display) with auto-sense backlight and contrast function		
		Text mode	Text, Chart or Trace mode
Analog output		Isolated DC 0/4~20 mA corresponding to pH/ORP, max load 500Ω	
Temp. output		Isolated DC 0/4~20 mA	-
Serial interface		-	RS-485
Calibration mode		3 points	5 points
Event logbook		-	50 event records
Set point	Contact	240 VAC, 0.5A max. (recommended)	
	Activate	Hi/Lo, Hi/Hi, Lo/Lo selectable two limited programmable, ON/OFF	
Wash	Contact	240 VAC, 0.5A max. (recommended)	
	Time	On: 0~99min. 59sec, Off: 0~999hr 59min.	
Ambient temperature		0~50°C	
Storage temperature		-20~70°C	
Voltage output		DC ±12V, 1W Max., for PH-300T(Optional)	
Power supply		100V~240VAC±10%, 50/60Hz, 8W Max.	
Installation		Wall mounting, Pipe mounting, Panel mounting	
Dimensions		144 mm x 144mm x 115 mm (H x W x D), 1/2 DIN	
Cut off dimensions		138 mm x 138 mm (H x W)	
Weight		0.8 kg	
Protection		IP 65 (NEMA 4X)	

What's included? 4 Panel mounting clips, pH4, pH7 buffer solutions, Plastic L shaped electrode holder support base

EC-4310 Series Conductivity Transmitter

Extreme performance for wide range applications

The EC-4310 series conductivity transmitter has rugged IP 65 enclosure and outstanding EMC protection ability. Wide measurement range up to 2000mS/cm, high resolution up to 0.001 μ S/cm, and equipped with salinity and TDS modes, all these functionalities enable its versatile ability in more application fields with the consistent reliability.

Applications:

- 💧 Ultra-pure water 💧 Desalination
- 💧 Cooling water 💧 Scrubber
- 💧 Chemical process 💧 Wastewater

Features:

- 💧 Measurement range up to 2,000 mS/cm, resolution up to 0.001 μ S/cm
- 💧 Back-lit LCM display with graphical menu
- 💧 EC-4310 series with setting & last cal. info overview
- 💧 EC-4310-RS with Text, Chart, and Trace mode display
- 💧 Two limited ON/OFF contact output
- 💧 Equipped with TDS, Salinity mode
- 💧 Password protection



Model		EC-4310	EC-4310-RS
Measuring range	Conductivity	0.000 μ S/cm~2000 mS/cm in 7 ranges Auto or Fixed range, \pm 1% (\pm 1 Digit)	
	Resistivity	0.00~20.00M Ω · cm, \pm 1% (\pm 1 Digit)	
	Salinity	0.0~70.0 ppt, \pm 1% (\pm 1 Digit)	
	TDS	0~19999 ppm ; 0.00~199.99 ppt	
	Temperature	Pt-1000/Pt-100: -30.0~200.0°C NTC-30K: -30.0~130.0°C \pm 0.2°C (\pm 1 Digit) (excluding Pt-100) with temp. error correction function	
Cell constant		Fixed or freely selectable	
Temperature Compensation		Automatic with Pt-1000/Pt-100 or NTC 30K or manual adjustment	
Temperature coefficient		Linear compensation from 0.00~20.00% Non-Linear Compensation for natural water	
Display		Large LCM(graphic display) with auto-sense backlight and contrast function	
		Text mode	Text, Chart or Trace mode
Analog output		Isolated DC 0/4~20 mA corresponding to measurement, max load 500 Ω	
Temp. output		DC 0/4~20 mA	-
Serial interface		-	RS-485
Event logbook		-	50 event records
Settings	Contact	240 VAC, 0.5A max. (recommended)	
	Activate	Hi/Lo, Hi/Hi, Lo/Lo selectable two limited programmable, ON/OFF	
Wash	Contact	240 VAC, 0.5A max. (recommended)	
	Time	On: 0~99min. 59sec, Off: 0~999hr 59min.	
Ambient temperature		0~50°C	
Storage temperature		-20~70°C	
Power supply		100 ~ 240 VAC \pm 10%, 50~60 Hz, 7W Max.	
Installation		Wall mounting, Pipe mounting, Panel mounting	
Dimensions		144mm x 144 mm x 115 mm (H x W x D) , 1/2 DIN	
Cut off dimensions		138mm x 138 mm (H x W)	
Weight		0.8 kg	
Protection		IP 65 (NEMA 4X)	

What's included? 4 Panel mounting clips

DC-5310 Series Dissolved Oxygen Transmitter

Versatile and robust

The DC-5310 series transmitter is compatible with wide range applications of oxygen measurement. The graphical menu driven operation with setting and calibration information in full text pages provide the extreme ease of use in all functions. The DC-5310-RS integrates the advantage of RS model features including graphical trace curve, events logbook and RS-485 interface.

Applications:

- 💧 Wastewater aeration 💧 Environment
- 💧 Fish farming 💧 Fermentation

Features:

- 💧 Compatible with WTW pre-amplifier 690 sensor
- 💧 Compatible with polarographic analog sensors
- 💧 Compatible with trace level(ppb) polarographic sensors
- 💧 IP 65 waterproof and dustproof design
- 💧 DC-5310 series with setting & last cal. info overview, graphical menu
- 💧 DC-5310-RS with Text, Chart, and Trace mode display
- 💧 Sensor slope status indicator for pre-amplifier sensor
- 💧 Salinity correction & atmospheric pressure correction
- 💧 Password protection



Model		DC-5310	DC-5310-RS
Measuring range	%Saturation	0.0 ~ 600.0%, (Depends on the sensor), $\pm 0.5\%$ of reading (± 1 Digit)	
	mg/l, ppm	0.00~60.00 mg/l (ppm), (Depends on the sensor), $\pm 0.5\%$ of reading (± 1 Digit)	
	$\mu\text{g/l}$, ppb	0.0~9999.9 $\mu\text{g/l}$ (ppb), (Depends on the sensor), $\pm 0.5\%$ of reading (± 1 Digit)	
	O ₂ % Gas	0.00~120.0% O ₂ , (Depends on the sensor), $\pm 0.5\%$ of reading (± 1 Digit)	
	Temperature	0.0~140.0°C, (Depends on the sensor), $\pm 0.2^\circ\text{C}$ (± 1 Digit) with temp. error correction function	
Temperature compensation	NTC 30K or NTC 22K automatic compensation or manual adjustment		
Salinity correction	0.0 ~ 45.0 ppt		
Pressure correction	0.500 ~ 2.500 bar or 7.25 ~ 36.25 psi manual adjustment		
	500~2500mmHg manual adjustment		
Display	Large LCM (graphic display) with auto-sense backlight and contrast function		
	Text mode		Text, Chart or Trace mode
Calibration mode	One point or two points calibration		
Analog output	Isolated DC 0/4~20 mA corresponding to measurement, max load 500Ω		
Temp. output	DC 0/4~20 mA		-
Serial interface	-		RS-485
Event logbook	-		50 event records
Set point	Contact	240 VAC, 0.5A max. (recommended)	
	Activate	Hi/Lo, Hi/Hi, Lo/Lo selectable two limited programmable, ON/OFF	
Wash	Contact	240 VAC, 0.5A max. (recommended)	
	Time	On: 0~99min. 59sec, Off: 0~999hr 59min.	
Ambient temperature	0~50°C		
Storage temperature	-20~70°C		
Voltage output	DC $\pm 8\text{V}$, Max 0.5W		
Power supply	100 ~ 240 VAC $\pm 10\%$, 50~60 Hz, 8W Max.		
Installation	Wall mounting, Pipe mounting, Panel mounting		
Dimensions	144 mm x 144mm x 115 mm (H x W x D), 1/2 DIN		
Cut off dimensions	138 mm x 138 mm (H x W)		
Weight	0.8 kg		
Protection	IP 65 (NEMA 4X)		

What's included? 4 panel mounting clips, Plastic L-shaped electrode holder support base

CT-6310-RS Chlorine/Ozone Transmitter

For all range sanitary applications

The CT-6310-RS transmitter has rugged IP 65 enclosure and outstanding EMC protection ability. When combining with the residual chlorine electrode / ozone electrode, and a flow-chamber, the complete system is extremely powerful for detecting the free chlorine or ozone in all kinds sanitary applications. The transmitter integrates the advantage of RS model features including graphical trace curve, events logbook and RS-485 interface.

Applications:

- ♠ Recycled water
- ♠ Drinking water
- ♠ Cooling water
- ♠ Swimming pool
- ♠ Wastewater
- ♠ Beverage bottle disinfection

Features:

- ♠ Compatible with membrane covered, 2-wire current type Cl₂ or O₃ electrode
- ♠ Compatible with membrane covered, 4-wire voltage type Cl₂ electrode
- ♠ IP 65 waterproof and dustproof design
- ♠ Back-lit LCM display with graphical menu
- ♠ Setting & last cal. info overview
- ♠ Text, Chart, and Trace mode display
- ♠ One analog output and one RS-485 interface
- ♠ LED indication alarm or wash status signal
- ♠ Password protection



Model		CT-6310-RS
Measuring mode		Residual Chlorine / Ozone / Temperature
Measuring range	Cl ₂	0.000~100.0 ppm (mg/l) ±0.5% (±1 Digit), depends on sensor
	O ₃	0.00~20.00 ppm (mg/l) ±0.5% (± 1Digit), depends on sensor
	Temperature	-30 ~ 130°C, ±0.2°C (± 1Digit) with temp. error correction function
Resolution		Cl ₂ : 0.001 / 0.01 / 0.1ppm(mg/l), O ₃ : 0.01ppm(mg/l), Temp.: 0.1°C
Temperature compensation		Automatic with Pt-1000 / NTC-30K or manual adjustment
Display		Large LCM (graphic display) with auto/manual illumination function, Text, Chart, Trace mode
Analog output		Isolated DC 0/4~20 mA corresponding to Cl ₂ /O ₃ measurement, max load 500Ω
Serial interface		RS-485 (MODBUS RTU or MODBUS ASCII)
Event logbook		50 event records
Set point	Contact	240 VAC, 0.5A max. (recommended)
	Activate	Hi/Lo, Hi/Hi, Lo/Lo selectable two limited programmable, ON/OFF
Wash	Contact	240 VAC, 0.5A max. (recommended)
	Time	On: 0~99min. 59sec, Off: 0~999hr 59min.
Ambient temperature		0~50°C
Storage temperature		-20~70°C
Voltage output		DC±8V Max. 0.5W max.
Power supply		100V~240VAC±10%, 50/60Hz, 8W Max.
Installation		Wall mounting, Pipe mounting, Panel mounting
Dimensions		144 mm x 144mm x 115 mm (H x W x D), 1/2 DIN
Cut off dimensions		138 mm x 138 mm (H x W)
Weight		0.8 kg
Protection		IP 65 (NEMA 4X)

What's included? 4 Panel mounting clips

TC-7310-RS Turbidity/S.S. Transmitter

TC-7310-RS-M MLSS Transmitter

Intelligent feature with robust protection

The TC-7310 series Turbidity/Suspended Solids and MLSS transmitters have rugged IP 65 enclosure and can be installed at control panel or outdoors. When combining with a turbidity/S.S. or MLSS sensor, and an immersive holder, the complete system is able to provide reliable measurement in a typical wastewater open tank installation. The TC-7310 series integrates the advantage of Suntex intelligent transmitter's fine operation feature with the consistent reliability.

Applications:

- ♣ Wastewater effluent
- ♣ Sludge concentration / level
- ♣ Raw / Cooling water
- ♣ Activated / Digestion sludge

Features:

- ♣ Turbidity / S.S. measurement(TC-7310-RS)
- ♣ MLSS measurement(TC-7310-RS-M)
- ♣ IP 65 waterproof and dustproof design
- ♣ Back-lit LCM display with graphical menu
- ♣ Setting & last cal. info overview
- ♣ Text, Chart, and Trace mode display
- ♣ TC-7310-RS-M with activated and digested sludge calibration matrix
- ♣ Sensor wiper setting program
- ♣ Password protection



Model		TC-7310-RS	TC-7310-RS-M
Measurement mode		Turbidity/Suspended Solids	MLSS
Measuring unit		Turbidity: NTU, FTU, FNU Suspended solids: ppm, mg/l	ppm, mg/l
Measuring range		0.00~100.00 NTU (TC-100 sensor) 0.0~500.0 NTU (TC-500 sensor) 0~3000 NTU (TC-3000 sensor) 0.0~1000.0 mg/l (ppm) (TCS-1000 sensor)	0~50,000 mg/l (ppm) (TS-MxS-A sensor)
Calibration Mode		Standard solution up to 5 points calibration and correction factor calibration (for S.S., MLSS)	
Electrode Zero		Sensor internal zero point correction activation function	
Display		Large LCM (graphic display) with auto/manual illumination function, Text, Chart, Trace mode	
Analog output		Isolated DC 0/4~20 mA corresponding to measurement, max load 500Ω	
Serial interface		RS-485 (MODBUS RTU or MODBUS ASCII)	
Event logbook		50 event records	
Set point	Contact	240 VAC, 0.5A max. (recommended)	
	Activate	Hi/Lo, Hi/Hi, Lo/Lo selectable two limited programmable, ON/OFF	
Wash	Contact	240 VAC, 0.5A max. (recommended)	
	Time	On: 0~99min. 59sec, Off: 0~999hr 59min.	
Ambient temperature		0 ~ 50°C (Sensor working temp.: 0~40°C)	
Sensor Wiper		Auto, sensor internal function for fixed 10 min per wipe, or 30min per wipe(for TC-100 sensor only) Manual, setting from 2~9 min per wipe or 2~29 min per wipe (for TC-100 sensor only)	
Ambient temperature		Transmitter: 0~50°C; Sensor: 0~40°C	
Storage temperature		-20 ~ 70°C	
Voltage output		DC ±12V	DC ±24V
Power supply		100 V~240 VAC ±10%, 8W max., 50/60 Hz	
Installation		Wall mounting, Pipe mounting, Panel mounting	
Dimensions		144 mm x 144mm x 115 mm (H x W x D), 1/2 DIN	
Cut off dimensions		138 mm x 138 mm (H x W)	
Weight		0.8 kg	
Protection		Transmitter: IP65 (NEMA 4X); Sensor: IP68 (max. depth of 2m underwater)	

What's included? 4 Panel mounting clips, Plastic L shaped electrode holder support base

IT-8310-RS Ion Transmitter

Proven performance for demanding field

The new IT-8310-RS ion transmitter has rugged IP 65 enclosure and can be installed at control panel or outdoors. When combining with a fluoride ion selective electrode and an immersive holder, the complete system is extremely powerful of detecting the F⁻ ion in wastewater effluent of semiconductor, solar panel, LCD industries. The new IT-8310-RS ion transmitter integrates the advantages of Suntex intelligent transmitter's fine operation feature with the consistent reliability.

Applications:

- Wastewater effluent of semiconductor, solar panel, and LCD industries

Features:

- Ion-selective method provides real-time monitoring, reduces pre-treatment & consumable cost
- 2~5 points calibration equipped with Iso-potential point compensation
- Back-lit LCM display with graphical menu
- IP 65 waterproof and dustproof design
- One analog output and one RS-485 interface
- Two limited ON/OFF contact output
- pX mode in accordance with specific measuring unit application
- Password protection



Model	IT-8310-RS	
Method	Ion selective electrode method	
Ion type	X ⁻ / X ⁻ / X ⁺ / X ⁺⁺	
Measuring mode	Ion / mV / Temp.	
Measuring ranges	mg/L (ppm)	0.00 ~ 99,999 mg/L (ppm)
	pX	0.00~20.00 pX, ±0.01 pX (±1 Digit)
	mV	-1999~1999 mV, ±0.1% (±1 Digit)
	Temperature	-30.0~130.0°C, ± 0.2°C (±1 Digit) with temp. error correction function
Temperature Compensation	Automatic with Pt-1000 or NTC 30KΩ	
	Manual adjustment / OFF	
Calibration mode	2~5 points calibration equipped with Iso-potential point compensation	
Input impedance	> 10 ¹² Ω	
Display	Large LCM(graphic display) with auto/manual illumination function, Text, Chart, Trace mode	
Analog Output	Isolated DC 0/4~20 mA corresponding to Ion/mV measurement, Max. load 500Ω	
Logbook	50 event records	
Serial Interface	RS-485 (MODBUS RTU or ASCII)	
Setting	Contact	240VAC, 0.5A max. (recommend)
	Activate	Hi/Lo, Hi/Hi, Lo/Lo selectable two limited programmable, ON/OFF
Wash	Contact	240VAC, 0.5A max. (recommend)
	Activate	ON: 0~99min. 59sec., OFF: 0~999 hours 59min.
Ambient Temperature	0~50°C	
Storage Temperature	-20~70°C	
Voltage Output	DC±12V, 1W Max.	
Power Supply	100V~240VAC±10%, 8W Max., 50/60Hz	
Installation	Wall / Pipe / Panel Mounting	
Dimensions	144mm × 144mm × 115mm (H×W×D), 1/2 DIN	
Cut off Dimensions	138 mm × 138 mm (H × W)	
Weight	0.8kg	
Protection	IP65 (NEMA 4X)	

What's included? 4 Panel mounting clips, Plastic L shaped electrode holder support base

PC-100/PC-110 pH/ORP Panel Meter

Compact and Pragmatic

The PC-100 & PC-110 pH/ORP panel meters utilize microprocessor technology to provide enhanced capabilities with economic price. The compact design fits in small space installation. The PC-100 features sample monitoring and the PC-110 offers one relay output to sufficiently activate your process system.



Applications:

- 💧 Water treatment
- 💧 Pure water system
- 💧 Clean room
- 💧 Wastewater treatment
- 💧 Scrubber
- 💧 Electronics process

Features:

- 💧 48 x 96 mm Microprocessor pH/ORP Monitor & Controller
- 💧 Sensor slope performance diagnosis & error message
- 💧 User-friendly operation
- 💧 Automatic temperature compensation
- 💧 Compatible with Pt-1000 and NTC 30K temperature probe
- 💧 Isolated current output DC 0/4~20mA
- 💧 Gradually continuous sample measurements average function to enhance stability
- 💧 PC-110 offers one relay contact output, one set point with programmable hysteresis function

Model		PC-100	PC-110
Measuring Range & Accuracy	pH	-2.00 ~ 16.00 pH, ± 0.01 pH (± 1 Digit)	
	ORP	-1999 ~ 1999 mV, $\pm 0.1\%$ (± 1 Digit)	
	Temperature	-30.0~130.0°C, $\pm 0.2^\circ\text{C}$ (± 1 Digit) with temp. error correction function	
Temperature Compensation		Automatic with Pt-1000 or NTC 30K or manual adjustment	
Input impedance		$> 10^{12}\Omega$	
Display		LCD display	
Analog output		Isolated DC 0/4~20 mA corresponding to measurement, max load 500 Ω	
Set point	Contact	-	240 VAC, 0.5A max.
	Activate	-	Hi/Lo one ON/OFF relay output
Working temperature		0~50°C	
Storage environment		-10~70°C	
Power Supply		100V~240VAC $\pm 10\%$, 50/60Hz, 3W Max.	
Installation		Panel mounting	
Dimensions		48 mm x 96mm x 110 mm (H x W x D), 1/8 DIN	
Cut off dimensions		44 mm x 92 mm (H x W)	
Weight		0.25 kg	

What's included? 2 Panel mounting clips

EC-410/EC-430 Conductivity Monitor

Compact and Pragmatic

The EC-410 & EC-430 conductivity monitors utilize microprocessor technology to provide enhanced capabilities with economical price. The compact design fits in small space installation. The EC-410 features for water quality monitoring and the EC-430 offers one relay output to sufficiently activate your process system.



Applications:

- 💧 RO system
- 💧 Cooling water
- 💧 Industrial process
- 💧 Boiler feed water
- 💧 Ultra-pure water
- 💧 Water treatment

Features:

- 💧 48 x 96 mm Microprocessor Water Quality Monitor & Controller
- 💧 Compatible with both conductivity and resistivity measurement
- 💧 Compatible with 2-Electrode or 4-Electrode sensors
- 💧 Automatic temperature compensation
- 💧 Compatible with Pt-1000 and NTC 30K temperature probe
- 💧 Linear and non-linear temperature coefficient
- 💧 Isolated current output DC 4~20mA
- 💧 Gradually continuous sample measurements average function to enhance stability
- 💧 EC-430 offers one relay contact output, one set point with programmable hysteresis function

Model		EC-410	EC-430
Measuring Range & Accuracy	Conductivity	0.00 μ S/cm~200.0 mS/cm in 5 ranges , \pm 1% (\pm 1 Digit)	
	Resistivity	0.00~20.00M Ω ·cm, \pm 1% (\pm 1 Digit)	
	Temperature	-30~130.0°C, \pm 0.2°C (\pm 1 Digit) with temp. error correction function	
Cell constant		0.01, 0.05, 0.1, 0.5, 10.00 cm ⁻¹ fixed, freely selectable 0.008~19.99cm ⁻¹	
Temperature Compensation		Automatic with PT-1000 or NTC 30K or no compensation	
Temperature coefficient	Conductivity	Non-Linear compensation	
	Resistivity	Linear compensation from 0.00~40.00%	
Display		LCD display	
Analog output		Isolated DC 4~20 mA corresponding to measurement, max load 500 Ω	
Setting	Contact	-	240 VAC, 0.5A max.
	Activate	-	Hi/Lo one relay output
Ambient temperature		0 ~ 50°C	
Storage temperature		-20 ~ 70°C	
Power Supply		100V~240VAC \pm 10%, 50/60Hz, 5W Max.	
Installation		Panel mounting	
Dimensions		48 mm x 96 mm x 110 mm (H x W x D), 1/8 DIN	
Cut off dimensions		44 mm x 92 mm (H x W)	
Weight		0.25 kg	

What's included? 2 Panel mounting clips

PC-300A Series pH/ORP Transmitter

Easy & reliable wastewater pH/ORP control

The PC-300A series pH/ORP transmitter provides easy and reliable operation and performance, especially suitable for wastewater application. PC-320A provides Hi1, Hi2, Lo1, Lo2 four relays control for special needs in controlling devices. PH-300T acts as an accessorial field transmitter to extend cable transmission up to 100m for synchronized field display and calibration work.

Applications:

- 💧 Water & Wastewater
- 💧 Scrubber

Features:

- 💧 pH / ORP measurement
- 💧 Intuitive tuning-knob calibration and relay setting, easy for weekly wastewater calibration work
- 💧 Enhanced standby function protects from inadvertent operation
- 💧 Two(PC-310A) or four(PC-320A) ON/OFF contact outputs
- 💧 Two/three wires distribution design, possible for connecting solution ground to reduce filed signal interference
- 💧 LED indication alarm



Model		PC-310A	PC-320A	PH-300T
Measuring range	pH	0.00 ~ 14.00 pH, ±0.01 (±1 Digit)		
	ORP	-1999 ~ 1999 mV, ±0.1% (±1 Digit)		
Auto temp compensation		Automatic with NTC 30K probe		Automatic with Pt-1000
Manual temp. compensation		25°C fixed temperature compensation		--
		Fixed temperature compensation with resistance		
Input impedance		> 10 ¹² Ω		
Display		0.8 inch LCD		0.5 inch LCD
Analog output		Isolated DC 4~20 mA corresponding to 0~14 pH or -1000~+1000mV		Low impedance DC voltage output or DC 4~20mA output
Set point	Relays	2 x Relays	4 x Relays	--
	Contact	2A max. (recommended)		--
	Activate	Hi/Lo	Hi1/Hi2/Lo1/Lo2	--
Function check		Fixed 4 or 20mA analog output and relay test		--
Ambient temperature		0~50°C		
Storage temperature		-20~70°C		
Voltage output		DC ±12V, 1W Max. for PH-300T (Optional)		--
Power supply		100V~240VAC±10%, 50/60Hz, 6W Max.		DC 32V, 3W Max.
Installation		Panel mounting		Wall or pipe mounting
Dimensions		144 mm x 144 mm x 225 mm (H x W x D), 1/2 DIN		70 mm x 110 mm x 45 mm (H x W x D)
Cut off dimensions		135 mm x 135 mm (H x W)		--
Weight		1.2 kg		0.4 kg

What's included? (PC-310A/PC-320A) Panel mounting kit, pH4, pH7 buffer solutions, Plastic L shaped electrode holder support base

pH/ORP Transmitter Accessories

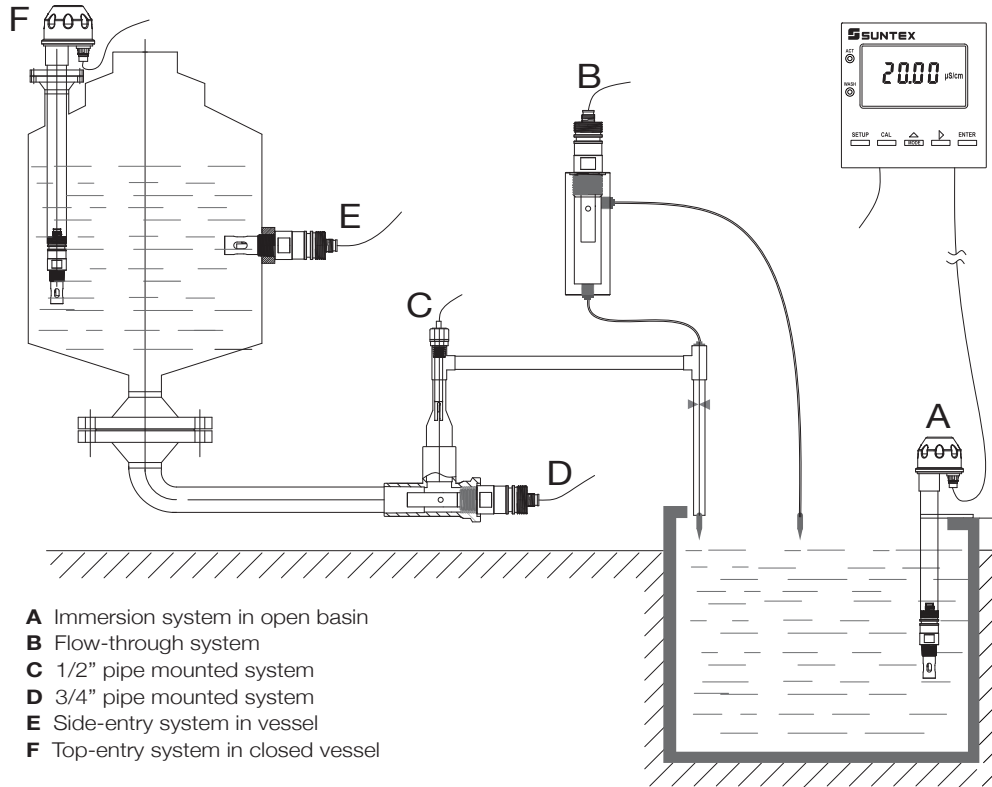
PH-300T Accessorial pH / ORP Transmitter

The PH-300T accessorial pH/ORP transmitter is designed for signal enhancement when distance from sensor to original transmitter is over 30m, or when environment is interfered by electromagnetic and so on.



Immersive protection holders	
Model	Description
8-09-5 +PP-100A	Protective Electrode Holder for pH/ORP electrode, 1M Incl. Junction Box
8-09-5 + PP-100AN	Protective Electrode Holder for pH/ORP electrode with NTC 30K temperature probe, 1M, Incl. Junction Box
8-09-5 + PP-100AP	Protective Electrode Holder for pH/ORP electrode with PT-1000 temperature probe, 1M, Incl. Junction Box
Extension cable for sensors	
Model	Description
RG-58	Extension cable for pH/ORP sensor (per meter)
F94009-BK	Extension cable for pH/ORP sensor with temperature probe or solution ground probe (per meter)
Electrode housings	
Model	Description
8-IF03PVC	pH/ORP sensor inline housing
8-TF03	pH/ORP sensor bypass chamber
8-010110-04	Alternative fixed cable pH/ORP sensor flow-through chamber
Immersive protection holder's optional accessories	
Model	Description
8-26-7	Plastic L shaped sensor holder support base
00416A	Stainless L shaped sensor holder support base (Stainless support base is designed for PP electrode holders whose length is longer than 1 meter; or for PP electrode holders which are immersed in a running basin.)
8-CH-10	pH/ORP sensor auto clean kit
8-SF01	Protection holder float for measurement in variable water levels or in lakes, etc.
Standard buffers	
Model	Description
8-03	Buffer solution, pH4.01, 500 ml
8-04	Buffer solution, pH7.00, 500 ml
8-23	Buffer solution, pH10.00, 500ml
8-13	3 mol/l KCl solution, 500ml
Simulator	
Model	Description
PS150	pH/mV signal simulator
Sun shield	
Model	Description
8-35 + 8-35-1	Sun shield for 1/2 DIN transmitter with Pipe mounting kit
8-35 + 8-35-2	Sun shield for 1/2 DIN transmitter with Wall mounting kit
8-35-3	Sun shield adapter kit for 1/4 DIN transmitter

How to build a Conductivity Measurement System



There are four major elements to make a complete measurement system

1. Transmitter: to translate the sensor's reading into a displayed measurement and transfer the data to the process control system



3. Cable: to transmit the signal between a sensor and a transmitter



2. Sensor: directly mounted in the field to measure solutions



4. Sensor Connection: to install the sensor and connect to the system, and protect the sensor in the measurement solutions



8-24X Series Conductivity Sensor

For medium to high conductivity solutions

The 8-24X series conductivity sensors apply the state of art 4-Electrode measurement principle to accurately measure medium to high conductivity solutions. Its modular cable and sensor design provides the most convenience of sensor re-installation. The 8-241-01 sensor is a HF resistant one, while the 8-242 sensor can stand higher temperature up to 120°C.



8-241 / 8-241-01(gray)
8-242(light yellow)

Specifications

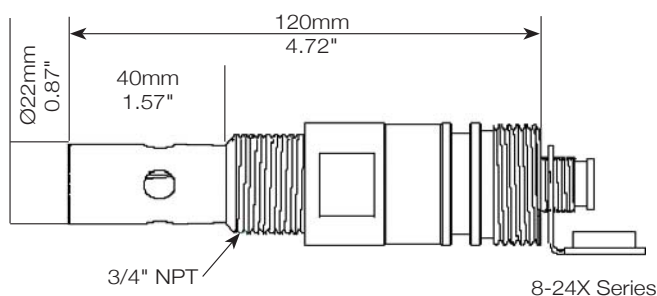
Model	8-241	8-241-01	8-242
Type	4-electrode sensor	4-electrode sensor	4-electrode sensor
Range	20.00µS/cm~500.0mS/cm	20.00µS/cm~500.0mS/cm	20.00µS/cm~500.0mS/cm
Working temp.	0~70°C	0~70°C	0~120°C
Pressure range at 25°C (77°F)	0~7 bar	0~7 bar	0~7 bar
Electrode material	Titanium, CPVC	Monel, CPVC	Titanium, PVDF
Body material	CPVC	CPVC	PVDF
HF resistant electrode	-	Yes	-
Temperature sensor	NTC 30K	NTC 30K	NTC 30K
Cell constant	0.5 cm ⁻¹	0.5 cm ⁻¹	0.5 cm ⁻¹
Process connection	3/4" NPT	3/4" NPT	3/4" NPT
Insertion length	40 mm	40 mm	40 mm
Max. length	120 mm	120 mm	120 mm
Compatible cable length	5, 10, 20, 30m	5, 10, 20, 30m	5, 10, 20, 30m

Accessory

Sensor Connection				
Model	8-TF01			
Description	3/4" NPT T-Connector			
Cable				
Model	8-105	8-110	8-120	8-130
Cable length	5 m	10 m	20 m	30 m



8-TF01
T-Connector



Cable

8-22X Series Resistivity Sensor

For pure water applications

The 8-22X series resistivity sensors are designed for measuring very low conductivity solutions. With different cell constant, the 8-22X sensors provide different range of the ultra-pure/pure water measurement. Its modular cable and sensor design provide the most convenience of sensor re-installation.



8-22X Series

Specifications

Model	8-221	8-222	8-223
Type	2-electrode sensor	2-electrode sensor	2-electrode sensor
Typical application	Ultra-pure water	Pure water	R.O. system
Range ($\mu\text{S}/\text{cm}$) ($\text{M}\Omega\cdot\text{cm}$)	0.05~20.0 $\mu\text{S}/\text{cm}$ 0.00~20.00 $\text{M}\Omega\cdot\text{cm}$	0.05~100.0 $\mu\text{S}/\text{cm}$ 0.00~18.00 $\text{M}\Omega\cdot\text{cm}$	0.1~200.0 $\mu\text{S}/\text{cm}$ 0.00~10.00 $\text{M}\Omega\cdot\text{cm}$
Working temp.	0~70°C	0~70°C	0~70°C
Pressure range at 25°C (77°F)	0~7 bar	0~7 bar	0~7 bar
Electrode material	Titanium	Titanium	Titanium
Body material	CPVC	CPVC	CPVC
Temperature sensor	NTC 30K	NTC 30K	NTC 30K
Cell constant	0.01 cm^{-1}	0.05 cm^{-1}	0.1 cm^{-1}
Process connection	3/4" NPT	3/4" NPT	3/4" NPT
Insertion length	63 mm	63 mm	48 mm
Max. length	144 mm	144 mm	129 mm
Compatible cable length	5, 10, 20, 30m	5, 10, 20, 30m	5, 10, 20, 30m



T-Connector


 8-TF02
Bypass chamber

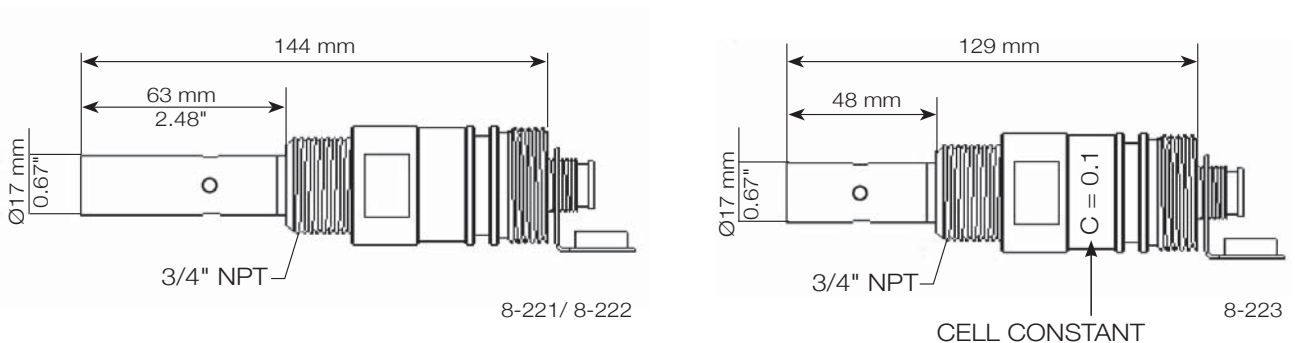
Accessory

Sensor Connection		
Model	8-TF01	8-TF02
Description	3/4" NPT T-Connector	3/4" NPT bypass chamber

Cable				
Model	8-105	8-110	8-120	8-130
Cable length	5 m	10 m	20 m	30 m



Cable



Fixed Cable Resistivity/Conductivity Sensor

8-11 Series Resistivity Sensor

8-244 Series Conductivity Sensor

The 8-11 Series resistivity cells features in both economic fixed cable and robust design. The cells are designed for measuring in low conductivity solutions such as pure water application. The 8-244 series applies 4-electrode technology for measuring medium to high conductivity solution and provides wide application suitability.



8-11 Series

8-244 Series

Specifications

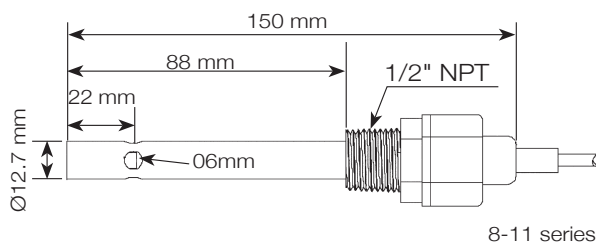
Model	8-11-3	8-11-4	8-244-10	8-244-30
Type	2-electrode sensor	2-electrode sensor	4-electrode sensor	4-electrode sensor
Range	100.0 μ S/cm ~ 18.00M Ω ·cm	100.0 μ S/cm ~ 18.00M Ω ·cm	20.00 μ S/cm~ 500.0mS/cm	20.00 μ S/cm~ 500.0mS/cm
Working temp.	0~45°C	0~45°C	0~70°C	0~70°C
Pressure range at 25°C	0~7 bar	0~7 bar	0~7 bar	0~7 bar
Electrode material	SS 316L	SS 316L	Epoxy/Graphite	Epoxy/Graphite
Temperature sensor	NTC 30K	NTC 30K	NTC 30K	NTC 30K
Cell constant	0.05 cm ⁻¹	0.05 cm ⁻¹	0.3 cm ⁻¹	0.3 cm ⁻¹
Process connection	1/2" NPT	1/2" NPT	1/2" NPT	1/2" NPT
Insertion length	88 mm	88 mm	82 mm	82 mm
Cable length	10 m	20 m	10 m	30 m

Accessory

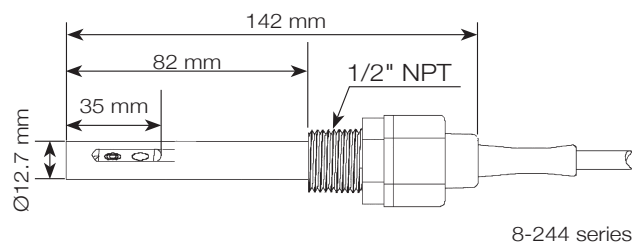
Sensor Connection	
Model	8-TF021
Description	1/2" NPT bypass chamber



8-TF021 Bypass chamber



8-11 series



8-244 series

D.O. Transmitter Accessories

D.O. sensor	
Model	Description
690	D.O. Sensor, with 7m cable, (0~60.0mg/l, 0~50°C, incl. 2 extra replacement membrane)
620	Replacing membrane kit for D.O. Sensor (2pc)
Immersive protection holder	
Model	Description
8-09-4 + DO-100	Protective Sensor Holder for D.O. sensor, 1M Incl. Junction box
Immersive protection holder's optional accessory	
Model	Description
8-26-7	Plastic L shaped sensor holder support base
00416A	Stainless L shaped sensor holder support base (For immersion in a running basin)
8-SF01	Protection holder float for measurement in variable water levels or in lakes, etc.
8-CH-20	D.O. sensor head auto clean kit
Extension cable for sensor	
Model	Description
F94008-G	Extension cable for 690 D.O. sensor (per meter)
Sun shield	
Model	Description
8-35 + 8-35-1	Sun shield for 1/2 DIN transmitter with Pipe mounting kit
8-35 + 8-35-2	Sun shield for 1/2 DIN transmitter with Wall mounting kit
8-35-3	Sun shield adapter kit for 1/4 DIN transmitter



690
D.O. Sensor
& Standard Kits



8-SF01 with holder base

Residual Chlorine Transmitter Accessories

CT-6310-RS Residual chlorine sensor	
Model	Description
7207-9149584	CLE 2.2-4P Residual Chlorine Sensor, 0-20ppm, (pH5.5~8.0), 5~45°C, Incl. 1 membrane cap, 100mL electrolyte,
7207-818470.7	Cable for CLE 2.2-4P Residual Chlorine Sensor (10m)
FCL-510	Residual Chlorine Sensor, 0-10ppm, (pH5.5~8.5), 0~45°C, Incl. 2 membrane cap & band, 2 each 30mL refill, a cathode polishing squares, fixed cable: 10ft (3m),
8-TF-04	Flow through chamber for FCL-510 chlorine sensor
CT-6110-POL Spare parts and accessories	
Model	Description
8-CL-01	Residual chlorine sensor (0~3 ppm, operating range pH5~9)
8-40	Ceramic beads pack
8-41	Housing of pH sensor for chlorine bypass chamber
5332026	Motor shield cover



CLE 2.2-4P Chlorine Sensor
FCL-510 Chlorine sensor



8-TF04 Flow through chamber

Turbidity/S.S./MLSS Transmitter Accessories

Turbidity/Suspended solids/MLSS sensor	
Model	Description
TC-100	0~100 NTU Turbidity Sensor, 0 ~ 40°C, cable length 10m, Immersion in open tanks
TC-500	0~500 NTU Turbidity Sensor, 0 ~ 40°C, cable length 10m, Immersion in open tanks
TC-3000	0~3000 NTU Turbidity Sensor, 0 ~ 40°C, cable length 10m, Immersion in open tanks
TCS-1000	0~1000 mg/l Suspended Solids sensor, 0 ~ 40°C, cable length 10m, Immersion in open tanks
TS-MxS-A	0~50,000 mg/l MLSS sensor, 0 ~ 40°C, cable length 9m, Immersion in open tanks
Immersive protection holder	
Model	Description
8-09-4 + 8-36 + DO-100	Protective sensor holder for Turbidity/S.S. sensor of TC-7310-RS transmitter, 1M, Incl. Junction box
8-09-4 + 8-36-1 + DO-100	Protective sensor holder for MLSS sensor of TC-7310-RS-M transmitter, 1M, Incl. Junction box
Immersive protection holder's optional accessories	
Model	Description
8-26-7	Plastic L shaped sensor holder support base
00416A	Stainless L shaped sensor holder support base
8-SF01	Protection holder float for measurement in variable water levels or in lakes, etc.
Sun shield	
Model	Description
8-35 + 8-35-1	Sun shield for 1/2 DIN transmitter with Pipe mounting kit
8-35 + 8-35-2	Sun shield for 1/2 DIN transmitter with Wall mounting kit



Turbidity/S.S. Sensor



MLSS Sensor



Turbidity sensor with holder



F⁻ Ion sensor

Ion Transmitter Accessories

F ⁻ Ion sensor	
Model	Description
8-PROCESS_F-	F ⁻ ISE combination electrode (measuring free F ⁻ ion in solutions) with ATC, 5m cable, range: 0.20~20000ppm F ⁻ , limitation: pH 5~10, conductivity: min. 500 μS/cm, flow rate: 1~20cm/s, Temp.:0~50°C
Immersive protection holder	
Model	Description
8-09-5 + PP-100F	Protective Electrode Holder for F ⁻ sensor, 1M, Incl. Junction box
Immersive protection holder's optional accessories	
Model	Description
F94009-BK	Extension cable for F ⁻ ION sensor (per meter)
8-26-7	Plastic L shaped sensor holder support base
00416A	Stainless L shaped sensor holder support base
Standard solution	
Model	Description
27503-13	F ⁻ ion standard solution 1000ppm, 475 ml



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