



# CLEAN L'EAU INSTRUMENTS CO.,LTD

Tester / Portable / Bench-top Meter / Controller / Electrodes







# **Company Profile**

昆凌仪器设备公司成立于2004年本公司致力于水质环境检测。不断创新研发制造环保及精确量测的水质分析仪器至今已销售10多余个国家,并在中国/台湾/新加坡及美国成立分公司服务广大的消费使用者。

客户的满意度向来是本公司团队的坚持,以量测的精准及优越的服务品质为基础,研发制造多样水质 检测仪器系统,积极为产业技术利用,学术领域创新,环境改造维护的方向做努力,并被同业视为复制学 习的对象,突显昆凌仪器投入水质环保及迈入国际化发展的愿景!

我们的产品提供高级的节能科技·有效减少电池用量及节省电力的技术·为环保尽一份心力。全系列提供完整机型·从轻巧且功能强悍的测试笔至线上型微电脑控制器·都成为环境勘查·样品量测·水质监控的好帮手。可利用于工业制程·废水测量·大地监测·养殖水族...等广泛用途。提供精确的参考数据。

我们衷心期待能与广大的CLEAN L'EAU仪器使用者一起携手迈向绿色环保时代的来临。为地球带来更多的维护与希望!创造生生不息的生存环境!

For more than a decade, Clean L'eau has delicate to world-class water analytical environmental testing instruments. Through our services, we continue to engineer and ensure our innovative products are well-cater to our diverse clienteles all over the world.

The continuous satisfaction of our customers is our company's top priority. Our company's foundation is built upon precise measurements and excellent service. Efforts are focused on technological applications, innovative methods, and environmental protection. Our resolution is shown in the development and production of water quality measurement. Ultimately, our goal is to internationalize and bring about safe water quality and environmental protection to the globe.

Clean L'eau is objected to develop a more energy-effective, battery-saving and long lasting operating analytical instruments. All our models from advanced on-line microchip monitoring/controlling system, bench top to portable weightless handheld devices are developed to meet different requirements and applied in varies environments such as ultra pure water distilled water testing laboratory practice, aquaculture industries even to industrial online waste water monitoring.

At Clean L'eau, we value each different unique experience and rely on those experiences to fuel our innovation. At Clean L'eau, we aspire to be the best to provide leading innovations and solutions for clean water. At Clean L'eau, we look forward to have that unique experience with you.

Our Logo:



We are very proud to introduce this water-friendly duck "LOU" as part of our company image.

Our new friend LOU is a Mallard as known as Anas platyrhynchos can only live and play in the water/pond that is filled with clean water.

We creatively incorporated the word "water" in France, and our friend "LOU" to express our determination to keep our water clean so LOU can live and play happily everywhere in the world.







Tester Feature 2
■ Water Measurement Tester (PH30 / ORP30 / CON30)4
■ Water Measurement Tester (DO30 / FCL30 / DOZ30)5
Portable / Bench-top Feature 6
pH/ORP Portable & Bench-top Meter (PH200 / PH100 / PH500 / PH350)(PH230 / PH250 / PH550)8
Conductivity Portable & Bench-top Meter(CON200 / CON500) (CON250 / CON550)10
■ Dissolved Oxygen Portable & Bench-top Meter (DO200 / DO500)(DO250 / DO550)12
Professional pH / ION Feature 14
pH / ION Portable & Bench-top Meter(PH300 / PH310 / PH600 / PH610)15
Industral Controller Feature 16
■ pH / ORP Controller (PH3000 / PH5000 / PH5500)18
Conductivity Controller (CON5000 / CON5500)19
■ Dissolved Oxygen Controller (DO5000 / DO5200 / DO5500)20
■ Free Chlorine Controller (FCL5000 / FCL5500)21
Ozone Controller (DOZ5000 / DOZ5500)22
■ pH / ORP Controller (PH6000)23
■ pH / ORP Controller (PH6100 / PH6200 / PH6300 / PH6400)24
■ Conductivity Controller (CON6100 / CON6200 / CON6300 / CON6400)25
■ Dissolved Oxygen Controller (LDO6100 / LDO6200 / LDO6300 / LDO6400)26
■ Dissolved Oxygen Controller (DO6100 / DO6200 / DO6300 / DO6400)27
■ ION Controller (ION6100 / ION6200 / ION6300 / ION6400)28
■ Turbidity / SS / MLSS Controller (TS6100 / TS6200 / TS6300 / TS6400)29
■ Turbidity Controller (TU6100 / TU6200 / TU6300 / TU6400)30
SS / MLSS Controller (SS6100 / SS6200 / SS6300 / SS6400)31
■ Free Chlorine Controller (CH6100 / CH6200 / CH6300 / CH6400)32
Electrodes / Accessories 33
■ Laboratory Electrodes / Accessories (pH / ORP)
■ Laboratory Electrodes / Accessories (Conductivity / DO)34
■ Laboratory Electrodes / Accessories (ION selective electrodes combination)35
■ Industrial Electrodes / Accessories (pH / ORP / Conductivity / DO / Chlorine / Ozone)36
Industrial Electrodes / Accessories ( DO / CON / ECL / Turbidity / SS / MLSS)38



# **Tester Feature**

# 30 series PH / ORP / CON / DO / FCL / DOZ



# Self-diagnostic



- · User-friendly design.
- Smile : Electrode is good condition.
- Unsmile : Proposed to replace the electrode.
- Only for PH / DO tester.

# **Button Keypad**



• Easy to operate.

# Housing



- Waterproof and dustproof in accordance with IP67.
- Suitable for an immensely wide range of various Laboratory / Harsh environments applications.

# **Energy Saving**



- Use 1 x 1.5V AAA battery.
   (CON30/FCL30/DOZ30 2x1.5V AAA)
- Low- battery indicator and easy to maintenance.

# Flow Cell

# Enclose &Stable flowing





- For DO/FCL/DOZ using.
   Keep flowing and stirring stable, provide for reliable result.
- Use 2 x AA batteries.













pH / ORP / Conductivity / TDS / Salinity Tester

#### **Feature**

- Extensive applications: Ideal for check on water quality, plating operations, field applications and other redox measurements.
- X Display: Large LCD screen with backlit for easy reading, provides comprehensive meter information.
- W Up to 5 points calibration for avoiding error with autobuffer-recognition calibration (PH30).
- Easy Maintenance, no tools needed to change batteries and electrode.
- ※ Auto-off function, data-memory function and stability indicator, low-batteries indicator.
- \* Auto data hold/lock function for reading stable measuring data.
- **X** Multi-purpose carrying case.
- Electrode slope indicator display(PH30).









CON<sub>30</sub>



Specifications	PH30	ORP30	CON30
			0~200.0uS/cm, 0~2000uS/cm,
Range	-2.00~16.00 pH	-900~+900 mV	0~20.00mS/cm,0~50.0mS/cm
			TDS: 0~50 ppt; Salinity: 0~30 ppt
Temperature Range	0.0~60.0°C/32.0~140.0°F	0.0~60.0°C/32.0~140.0°F	0.0~60.0°C/32.0~140.0°F
Resolution	0.01pH, 0.1°C/°F	1mV, 0.1°C/1°F	0.1,1uS/cm(ppm),0.01,0.1mS/cm(ppt)
Accuracy	±0.01 pH	±1 mV	±1 %F.S
Temperature Compensation	Auto / Manual	—	Auto
Temperature Coefficient	_	_	0.00~10.00% adjustable (default 2.00%)
Temperature Reference	_	_	15.0~30.0°C adjustable (default 25°C)
TDS Coefficient	<del>-</del>	_	0.40~1.00 adjustable (default 0.50)
Salinity Coefficient	_	_	0.65
Ingress Protection	IP67	IP67	IP67
Calibration	Auto, up to 5 points	_	1 point
Electrode	CS1930	CS2930	CS3930
Power Supply	1x1.5V AAA	1x1.5V AAA	2x1.5V AAA
Memory	10 sets	10 sets	10 sets
Display	22x32mm	22x32mm	22x32mm
ызыау	Photo-Luminescent LCD	Photo-Luminescent LCD	Photo-Luminescent LCD
Dimensions/Weight	164x37x40mm/90q	164x37x40mm/90g	164x37x40mm/90g

# **TESTER ACCESSORIES**

CS1930 - pH Electrode

Type: Glass

Test Range: 0~14pH

Temperature Range: 0.0~60.0° C

Electrolyte: 3 mol KCL



#### CS2930 - ORP Electrode

Type: Platinum

Temperature Range: 0.0~60.0° C

Reference System: Ag/AgCl Electrolyte: 3 mol KCL



# CS3930 - Conductivity Electrode

Type: PPS/Graphite

Temperature Range: 0.0~60.0° C

Cell Constant: K=1.0

# Dissolved Oxygen / Free Chlorine / Ozone Tester



#### **Feature**

- \* Extensive application : Aquacultural: Use to monitor oxygen levels in ornamental fish tanks and ponds; fish and shells farming and food & beverage, drinking water, swimming pools.
- X Display: Large LCD screen with backlit for easy reading, provides comprehensive meter information.
- **X** Easy Maintenance, no tools needed to change batteries and electrode.
- **X** Auto-off function, data-memory function and stability indicator, low-batteries indicator.
- X Auto data hold/lock function for reading stable measuring data.
- \* Multi-purpose carrying case.
- ※ Electrode slope indicator display(DO30).









DOZ30



Specifications	DO30	FCL30	DOZ30
Range	0.00~20.00mg/L, 0.0~200.0%	0.05~10.00ppm	0.05~5.00ppm
Temperature Range	0.0~60.0°C/32.0~140.0°F	0.0~60.0°C/32.0~140.0°F	0.0~60.0°C/32.0~140.0°F
Resolution	0.01mg/L, 0.1%, 0.1°C/ 0.1°F	0.01ppm, 0.1°C/1°F	0.01 ppm
Accuracy	±1.5%F.S. ±0.3°C/0.5°F	± 2%F.S.	±2%F.S.
Temperature Compensation	Auto	_	_
Atmospheric Pressure Compensation	600~1100 mbar	_	_
Salinity Compensation	0.0~40.0 ppt	_	_
Ingress Protection	IP67	IP67	IP67
Calibration	1 or 2 points	2 points	2 points
Electrode	CS4930	CS5930	CS6930
power Supply	1x1.5V AAA	2x1.5V AAA	2x1.5V AAA
Memory	10 sets	10 sets	10 sets
Display	22x32mm	22x32mm	22x32mm
Display	Photo-Luminescent LCD	Photo-Luminescent LCD	Photo-Luminescent LCD
Dimensions/Weight	164x37x40mm/90g	164x37x40mm/90g	164x37x40mm/90g
Domark	_	A530 Miniature Stirrer with a	_
Remark		constant speed.	

#### **TESTER ACCESSORIES**

#### CS4930 - Galvanic DO Electrode

Type: Platinium Cathode/Alloy Anode Test Range: 0~20mg/L Temperature System: NTC22K

Temperature Range: 0~60°C



#### CS5930 - FCL 30 Electrode

Type: Three-electrode sensor Temperature Range: 0~60°C Reference System: Ag/AgCl Electrolyte: 3 mol Colloid KCL



# CS6930 - DOZ 30 Electrode

Type: Three-electrode sensor Temperature Range: 0~60°C Reference System: Ag/AgCl Electrolyte: 3 mol Colloid KCL





200 / 250 / 500 / 550 series PH / CON / DO







# **Electrode Slot**

· Easy for storage electrode.

# **BNC/DIN Connector**



# Housing

- $^{\circ}$  Waterproof and dustproof in accordance with IP65(PH)/IP67(CON/DO).
- Multi-point auto calibration for avoiding error.
- Suitable for immensely wide range of various Laboratory / Harsh environments applications.

# **Energe Saving**







- Use 2 x 1.5V AA batteries.
- Low-battery indicator and easy to maintenance.

# **Field Carry Case**





 The field belt and other accessories help crate work station for you in the field.

# Large LCD Screen



43 x 70 mm large LCD screen for easy reading.

# Ring-pull Design



Easy to carry.



# France 3 250°

- ∘ 100 x 74 mm large LCD screen.
- Automatically switch to MTC mode when there is no temperature probe.
- Data hold function and auto buffer recognition.

# **Electrode Holder**



 Measuring angle can be adjust.



# 250/550 series



 Background illumination and data transfer software by USB2.0 connect to PC.







# **Built-in Battery**







- Built-in rechargeable Li-battery for moving operate.
- Rechargeable bettery can be connected to the USB port or power outlet for charging.



pH / ORP Portable & Bench-top Meter

#### **Feature**

CLEAN LEA

- **X** Applications: Schools and Education institutes, Chemical laboratories, Quality assurance testing, Food science.
- X Large LCD display, great 120 degree angle view.
- ₩ Up to 5 points calibration for avoiding error with autobuffer-recognition calibration (PH200/PH500).
- \* Temperature offset adjusting function.
- \* 100 sets of data storage function(PH200/PH500).

- **X** Built-in rechargeable Li-battery with low battery indicator (Bench-top Meter).
- ※ Offset value function.
- **X** Selectable mode for antimony electrode for HF (hydrofluoric acid) application(PH200/PH500).
- X Stability indicator and auto data Hold/Lock function for easy reading.
- \* Self-diagnostic message codes for easy reference (PH200/500).

PH200

PH100

PH500

PH350





Specifications	PH200	PH100	PH500	PH350
pH Range	-2.00~16.00 pH		-2.00~16.00 pH	
ORP Range	-2000~2000 mV		-2000~2000 mV	
Temperature Range	-5.0~120.0°C/23.0~248.0°F		-5.0~120.0°C/23.0~248.0°F	
Resolution	0.01pH,0.1mV(-600.0~600.0).0.1°C/0.1°F		0.01pH, 0.1mV(-600.0~600.0).0.1°C/0.1°F	
Accuracy	±0.01pH, ±0.2mV/1mV, ±0.3°C/±0.5°F		±0.01pH, ±0.2mV/1mV, ±0.3°C/±0.5°F	
Temperature Compensation	Auto / Manual		Auto / Manual	
all Flacture de	Standard pH or	Standard pH	Standard pH or	Standard pH
pH Electrode	Antimony electrode		Antimony electrode	
Memory	100 sets	_	100 sets	_
Auto power off	10 minutes no key is pre	ssed	10 minutes no key is pressed	
	Auto, up to 5 points	Auto, up to 3 points	Auto, up to 5 points	Auto, up to 3 points
Calibration	(USA/NIST option)	(USA/NIST option)	(USA/NIST option)	(USA/NIST option)
Power Supply	2x1.5V AA		100~240 VAC	
Ingress Protection	IP65		IP54	
Size	73x152x42mm		150x194x56mm	
Weight	250g		1.0Kg	
Electrodes / Accessories		See P	233	

pH / ORP Portable & Bench-top Meter



#### **Feature**

- **X** Applications: Schools and Education institutes, Chemical laboratories, Quality assurance testing, Food science.
- X Large LCD display, great 120 degree angle view.
- ₩ Up to 5 points calibration for avoiding error with autobuffer-recognition calibration.
- \* Temperature offset adjusting function.
- ※ 100 sets of data storage function.
- ※ Beep sounds.

- **X** Built-in rechargeable Li-battery with low battery indicator (Bench-top Meter).
- **X** Electrode slope indicator.
- **X** Offset value function.
- **X** Selectable mode for antimony electrode for HF (hydrofluoric acid) application.
- **X** Stability indicator and auto data Hold/Lock function for easy reading.
- **X** Data transfer software by USB output interface.
- **X** With background illumination screen.



PH 250





Specifications	PH230	PH250	PH550	
pH Range	-2.00~16.00 pH		-2.00~16.00 pH	
ORP Range	-2000~2000 mV		-2000~2000 mV	
Temperature range	-5.0~120.0°C/23.0~24	8.0°F	-5.0~120.0°C/23.0~248.0°F	
Resolution	0.01pH, 0.1mV(-600.0~600.0).0.1°C/0.1°F		0.01pH, 0.1mV(-600.0~600.0).0.1°C/0.1°F	
Accuracy	±0.01pH, ±0.2mV/1mV, ±0.3°C/±0.5°F		±0.01pH, ±0.2mV/1mV, ±0.3°C/±0.5°F	
Temperature compensation	Auto / Manual		Auto / Manual	
pH electrode	Standard pH or Antimo	ny electrode	Standard pH or Antimony electrode	
Memory	100 sets		100 sets	
Auto power off	10 minutes no key is pro	essed	10 minutes no key is pressed	
Calibration	Auto, up to 5 points (US	SA/NIST option)	Auto, up to 5 points (USA/NIST option)	
Communication interfaces	_	USB	USB	
Power supply	2x1.5V AA		100~240 VAC	
Ingress Protection	IP65		IP54	
Size	73x152x42mm		150x194x56mm	
Weight	250g		1.0Kg	
Florence des / Assessades		C	D22	

See P.33 **Electrodes / Accessories** 



Conductivity Portable & Bench-top Meter

#### **Feature**

- **X** Applications: Water quality testing, Cooling tower water, Boiler water, Ponds, Pollution control, Waste water, Industrial process systems.
- X Large LCD display, great 120 degree angle view.
- \* Auto-off function.

- **X** Temperature offset.
- **X** Built-in rechargeable Li-battery with low battery indicator (Bench-top Meter).
- ※ 100 sets of data storage function.
- **X** Stability indicator and auto data Hold/Lock function for easy reading.





0~5.000uS/cm, 0~50.00uS/cm, 0~5.000uS/cm, 0~50.00uS/cm,	
Conductivity / TDS / 0~500.0uS/cm, 0~5000uS/cm, 0~500.0uS/cm, 0~500.0uS/cm,	
<b>Salinity Range</b> 0~50.00mS/cm, 0~500.0mS/cm, 0~50.00mS/cm, 0~500.0mS/cm,	
TDS: 0~500ppt; Salinity: 0~325ppt TDS: 0~500ppt; Salinity: 0~325ppt	opt
0.001uS/cm(ppm),0.01uS/cm(ppm)	)
Conductivity Resolution 0.1uS/cm(ppm) , 1uS/cm(ppm) 0.1uS/cm(ppm) , 1uS/cm(ppm)	
$0.01 \text{mS/cm(ppt)},  0.1 \text{mS/cm(ppt)} \qquad \qquad 0.01 \text{mS/cm(ppt)},  0.1 \text{mS/cm(ppt)}$	
Conductivity Accuracy ±1% F.S. ±1% F.S.	
Resistivity Range0~18.3 MΩ*cm0~18.3 MΩ*cm	
Resistivity Resolution       0.1 MΩ*cm         0.1 MΩ*cm	
Resistivity Accuracy $\pm 1\%$ F.S. $\pm 1\%$ F.S.	
Temperature Range -5.0~120.0°C/ 23.0~248.0°F -5.0~120.0°C/ 23.0~248.0°F	
Temperature Resolution 0.1°C/0.1°F 0.1°C/0.1°F	
Temperature Accuracy $\pm 0.3$ °C/ $\pm 0.5$ °F $\pm 0.3$ °C/ $\pm 0.5$ °F	
Temperature Compensation Auto Auto	
Reference Temperature 15.0~30.0°C (default 25°C) 15.0~30.0°C (default 25°C)	
Temperature Coefficient         0.00~9.99% (default 2.00%)         0.00~9.99% (default 2.00%)	
<b>TDS Coefficient</b> 0.40~1.00 (default 0.50) 0.40~1.00 (default 0.50)	
Salinity Coefficient 0.65 0.65	
Cell Constant0.01/0.1/1/10 (With specified electrode)0.01/0.1/1/10 (With specified electrode)	rode)
Power Supply 2x1.5V AA 100~240 VAC	
Ingress Protection IP67 IP54	
Size / Weight         73x152x42mm / 250g         150x194x56mm / 1.0Kg	
Electrodes / Accessories See P.34	

Conductivity Portable & Bench-top Meter



#### **Feature**

- \* Applications: Water quality testing, Cooling tower water, Boiler water, Ponds, Pollution control, Waste water, Industrial process systems.
- X Large LCD display, great 120 degree angle view.
- X Auto-off function.
- **X** Temperature offset.
- ※ Beep sounds.

- $\times$  100 sets of data storage function.
- **X** Built-in rechargeable Li-battery with low battery indicator (Bench-top Meter).
- **X** Stability indicator and auto data Hold/Lock function for easy reading.
- **X** Data transfer software by USB output interface.
- **X** With background illumination screen.





Specifications	CON250	CON550
	0~5.000uS/cm , 0~50.00uS/cm	0~5.000uS/cm , 0~50.00uS/cm
Conductivity / TDS/	0~500.0uS/cm , 0~5000uS/cm	0~500.0uS/cm , 0~5000uS/cm
Salinity Range	0~50.00mS/cm, 0~500.0mS/cm	0~50.00mS/cm ,0~500.0mS/cm
	TDS: 0~500ppt; Salinity: 0~325ppt	TDS: 0~500ppt; Salinity: 0~325ppt
	0.001uS/cm(ppm),0.01uS/cm(ppm)	0.001uS/cm(ppm),0.01uS/cm(ppm)
Conductivity Resolution	0.1uS/cm(ppm), 1uS/cm(ppm)	0.1uS/cm(ppm), 1uS/cm(ppm)
	0.01mS/cm(ppt), 0.1mS/cm(ppt)	0.01mS/cm(ppt), 0.1mS/cm(ppt)
Conductivity Accuracy	±1% F.S.	±1% F.S.
Resistivity Range	0~18.30 MΩ*cm	0~18.30 MΩ*cm
Resistivity Resolution	0.01 MΩ*cm	0.01 MΩ*cm
Resistivity Accuracy	±1% F.S.	±1% F.S.
Temperature Range	-5.0~120.0°C/ 23.0~248.0°F	-5.0~120.0°C/ 23.0~248.0°F
Temperature Resolution	0.1°C/ 0.1°F	0.1°C/ 0.1°F
Temperature Accuracy	±0.3°C/ ±0.5°F	±0.3°C/ ±0.5°F
Temperature Compensation	Auto	Auto
Reference Temperature	15.0~30.0°C (default 25°C)	15.0~30.0°C (default 25°C)
Temperature Coefficient	0.00~9.99% (default 2.00%)	0.00~9.99% (default 2.00%)
TDS Coefficient	0.40~1.00 (default 0.50)	0.40~1.00 (default 0.50)
Salinity Coefficient	0.65	0.65
Cell Constant	0.01/0.1/1/10 (With specified electrode)	0.01/0.1/1/10 (With specified electrode)
Data software	USB	USB
Power Supply	2x1.5V AA	100~240 VAC
Ingress Protection	IP67	IP54
Size / Weight	73x152x42mm/250g	150x194x56mm/1.0Kg
Electrodes / Accessories	See	P.34



Dissolved Oxygen Portable & Bench-top Meter

#### **Feature**

- X Applications: Ponds and aquariums, Aquaculture, Water and wastewater treatment, Education institutions, Field and Laboratory application.
- X Large LCD display, great 120 degree angle view.
- X Selectabel display in ppm or %.
- **X** Temperature offset adjusting function.
- ※ 100 sets of data storage function.

- X Selectable manual input of salinity / barometric / pipeline or depth pressure for compensation.
- \* Provides probe condition based on both offset and slope.
- **X** Built-in rechargeable Li-battery with low battery indicator (Bench-top Meter).
- X Stability indicator and auto data Hold/Lock function for easy reading.
- \* Selectable mode for Galvanic or Clark electrode.





Specifications	DO200	DO500
Range	0.00~40.00 mg/L, 0.0~400.0%	0.00~40.00 mg/L, 0.0~400.0%
nange	-5.0~120.0°C /23.0~248.0°F	-5.0~120.0°C /23.0~248.0°F
Resolution	0.01mg/L, 0.1%, 0.1°C/0.1°F	0.01mg/L, 0.1%, 0.1°C/0.1°F
Accuracy	±1.5% F.S.,±0.3°C/±0.5°F	±1.5% F.S.,±0.3°C/±0.5°F
Calibration	Auto / Manual	Auto / Manual
Salinity Compensation	0.0~45.0 ppt	0.0~45.0 ppt
Temperature Compensation	Auto / Manual	Auto / Manual
Atmospheric Pressure Compensation	450~800mmHg / 0.600~1.100bar	450~800mmHg / 0.600~1.100bar
Pipeline Pressure Compensation	0.00~1.00 Kg	0.00~1.00 Kg
Liquid Depth Compensation	0.0~10.0 m	0.0~10.0 m
Memory	100 sets	100 sets
Auto Power Off	10 minutes no key is pressed	10 minutes no key is pressed
Power Supply	2x1.5V AA	100~240 VAC
Ingress Protection	IP67	IP54
Size	73x152x42mm	150x194x56mm
Weight	250g	1.0Kg

**Electrodes / Accessories** See P.34





#### **Feature**

- **X** Applications: Ponds and aquariums, Aquaculture, Water and wastewater treatment, Education institutions, Field and Laboratory application.
- X Large LCD display, great 120 degree angle view.
- X Selectabel display in ppm or %.
- \* Temperature offset adjusting function.
- ※ Beep sounds.
- X Selectable manual input of salinity / barometric / pipeline or depth pressure for compensation.

- \* Electrode slope indicator.
- **X** Offset value function.
- **X** Built-in rechargeable Li-battery with low battery indicator (Bench-top Meter).
- \* Selectable mode for Galvanic or Clark electrode.
- \* Stability indicator and auto data Hold/Lock function for easy reading.
- X Data transfer software by USB output interface.
- **X** With background illumination screen.

# **DO250**





Specifications	DO250	DO550
Range	0.00~40.00 mg/L, 0.0~400.0%	0.00~40.00 mg/L, 0.0~400.0%
Kunge	-5.0~120.0°C /23.0~248.0°F	-5.0~120.0°C /23.0~248.0°F
Resolution	0.01mg/L, 0.1%, 0.1°C/0.1°F	0.01mg/L, 0.1%, 0.1°C/0.1°F
Accuracy	±1.5% F.S.,±0.3°C/±0.5°F	±1.5% F.S.,±0.3°C/±0.5°F
Calibration	Auto / Manual	Auto / Manual
Salinity Compensation	0.0~45.0 ppt	0.0~45.0 ppt
Temperature Compensation	Auto / Manual	Auto / Manual
Atmospheric Pressure Compensation	450~800mmHg / 0.600~1.100bar	450~800mmHg / 0.600~1.100bar
Pipeline Pressure Compensation	0.00~1.00 Kg	0.00~1.00 Kg
Liquid Depth Compensation	0.0~10.0 m	0.0~10.0 m
Memory	100 sets	100 sets
Auto Power Off	10 minutes no key is pressed	10 minutes no key is pressed
Communication interfaces	USB	USB
Power Supply	2x1.5V AA	100~240 VAC
Ingress Protection	IP67	IP54
Size	73x152x42mm	150x194x56mm
Weight	250g	1.0Kg
Electrodes / Accessories	See	P.34



# Professional pH / ION Feature

2014/08/28 11:19

7.397 pH

25.0 r B 4.01 7.00 10.01

Mem: 000/500

10:0000 User:00

# Portable / Bench-top PH 300/310 / PH 600/610 series

# **Calibration Reminder**

· Calibration cycle can be customize prompt for each measurement mode.

# Calibration Recorder

· Calibration point, date, slope can be record for each measurement mode.

# 1000 sets memory

· Up-to 1000 sets data memory (pH500 / mV250 / ION250 sets)

# **Button Keypad**

· Easy to operate.

# **Date and Time**

Date and time functions, can be change the arrangement.

# Wide Range

• PH: -2.000~20.000 · mV: -2000.0~2000.0 · ION: 0.000~9999 mg/L

# Large Backlit Screen

· Dot-matrix background illumination screen.

# Sample ID / User ID

· Sample ID / User ID can be customize setting.

# **ION Measurement**

2014/08/22 11:14 1.0 ng/L нтс 25.0 ℃ 🐧 Uncal ibrate

- · PH310 / PH610 series.
- · Use ION selective electordes for measurement.
- Up-to 7 point calibration.
- High resolution up to 0.001mg/L.

# **Data Stability Function**

Temp unit: Temp CAL: +0.0 °C Stable: ON Stable Time: MID Use w to set ENT to confirm or ESC to exit

 The data stability function can select slow / medium /

# **USB** Interface

· Data transfer software by USB2.0 connect to PC.







# **Interactive Smart Menu**

 $7.262_{\text{ph}}$ B MTC 25.0 ℃ Press ENT to

• Set to follow the screen prompts.

# **Password**

Please Input Passuord 000

Use 【▼ to set ENT to confirm or ESC to exit

 password protection prevents unauthorized tempering of setting.



pH / ION Portable & Bench-top Meter



#### **Feature**

PH300/600 series are idea for numerous applications including process plants, production facilities, the food industry, research, education and environmental monitoring.

All PH300/600 meters support with immensely wide measuring range, high resolution, multi-stage calibration slope, 3-stage data stability, to provide reliable result. And user-friendly design for dot-matrix background illumination screen, interactive smart menu, sample ID, user ID, time and date, 1000 sets data memory, calibration reminder prompt and data transfer by USB interface connect to PC that easy to operate.

PH300/600 is future oriented in many respects and greatly simplifies your work.



Specifications	PH300	PH310	PH600	PH610
pH/mV Test Range	-2.000~20.000pH / -2000.0~2000.0mV		-2.000~20.000pH / -2000.0~2000.0mV	
pH/mV Accuracy	±0.2% F.S. ±3LSD / ±0.1% F.S. ±3LSD		±0.2% F.S. ±3LSD / ±0.1% F.S. ±3LSD	
ION Test Range	_	0.000~9999 mg/L	_	0.000~9999 mg/L
ION Accuracy	_	±0.5% F.S. ±3LSD	_	±0.5% F.S. ±3LSD
Temperature Range/Accuracy	-10.0~120.0°C / 14.0~248.0°F; ±0.3°C/±0.5°F		-10.0~120.0°C / 14.0~248.0°F; ±0.3°C/±0.5°F	
Temperature compensation	Auto / Manual		Auto / Manual	
pH/mV Calibration	pH up to 5 points / ORP 1 points		pH up to 5 points / ORP 1 points	
pH Reference System	USA / NIST / DIN Select		USA / NIST / DIN Select	
ION Calibration	_	ION up to 7 points	_	ION up to 7 points
Calibration Remind	0~60 Days		0~60 Days	
Memory	750 sets	1000 sets	750 sets	1000 sets
Auto Power Off	10 minutes no key is pres	ssed	10 minutes no key is press	ed
Data stability	slow / medium / fast		slow / medium / fast	
Password	4-digit password		4-digit password	
Sample ID	4-digit		4-digit	
User ID	2-digit		2-digit	
Date system	YY/MM/DD; MM/DD/YY; DD/MM/YY		YY/MM/DD; MM/DD/YY; DD/MM/YY	
Time system	12H / 24H		12H / 24H	
Communication interfaces	USB		USB	
Data hold	ON / OFF		ON / OFF	
Temperature offset correction	±5.0°C / ±9.0°F Adjustab	le	±5.0°C / ±9.0°F Adjustable	
Power/Size/Weight	AAx2 / 73x152x42mm / 2	250g	100~240VAC / 150x194x56mm / 1.0Kg	
Electrodes / Accessories		See	P.34	



# Industrial Controller Feature

# 2 miles

# Panel-mounts / Wall-mounts series PH / CON / DO / FCL / DOZ

# **User ID**

■ Two level password protections prevent unauthorized tempering of setting.

# Output



- Real time measurement data transmission 0/4~20mA.
- RS485 Interface communication.

# **Open-back Design**

Waterproof and dustproof, easy to install.



# MEA SP2 SP2 PH5000 Controller PH5000 Controller

# 5000 series

■ Installation size: 93.5x93.5 mm







All controller built-in micro processor and equipped the best function and specification with appropriate electrodes assembly to continuously measuring and controller pH/ORP, Conductivity, DO, Free Chlorine, Ozone.

Application field including environmental water,municipal water and waste water treatment, chemical, pharmacetical, food & beverage and swimming pool etc... which water quality monitoring process necessary.

# Housing

■ Waterproof and dustproof in accordance with IP65, NEMA4X enclosures type.

# Large LCD Screen



large LCD with background illumination screen.

# **Button Keypad**



- Scratch-button panel design.
- Sensitive key, easy to operate.

# **Industral Flow Cell**

- For FCL & DOZ series (Free Chlorine & Ozone) controller.
- Keep the samples and air isolation to provide accurately and reliable end result.





# 6000 series

■ Installation size : 138x138mm

# **Backlight Sensor**

■ Auto/Manual adjustable background illumination.

# Simple Design Contacts



Easy to install construction.

# RELAY

- Two separately adjustable mechanical relays for high and low set-point (HIHI,LOLO,HILO).
- Adjustable hysteresis (dead bands) timing to prevent frequent chattering of relays around the set-point.

# **PLC Control**

■ PLC are designed for multiple analogue and digital input and output arrangements, extended temperature ranges, immunity to electrial noise and resistance to vibration and impact.

# Self-Cleaning

- 5000 / 5500 / 6000 series.
- Self-cleaning relays, user adjustable self-cleaning frequency and timing to extend electrode life.

# 5500 series

# Wall-mounts Type

Waterproof and dustproof, easy to mount on the wall.

# pH/mV Measurement

PH series can use for ORP measuring.





pH / ORP Controller

#### **Feature**

- **X** Application: For monitoring of Industrial Process, Wastewater measurements, Pharmaceutical, Chemical and Food & Beverage industries.
- X Panel or Wall mounts Enclosures, NEMA4X, IP65 waterproof, dust proof.
- \* Provide precise measurement at industrial site or water treatment process.
- \* Symmetric signal output interface, preventing electromagnetic interference.
- ※ Scaleable isolated output: 0/4~20mA.

- **X** Two level password protections prevent unauthorized of setting.
- **X** Large LCD with background illumination screen.
- \* Two separate mechanical relays for high and low (HH/HL/LL) setpoints.
- X Separately adjustable high and low set-point hysteresis (dead bands) prevent chattering of relays around the
- \* The third mechanical relays for electrode self-cleaning or alarm.

# PH3000



# PH5000



# PH5500



Specifications	PH3000	PH5000	PH5500
pH Range	-2.00~16.00 pH	-2.00~16.00 pH	-2.00~16.00 pH
Resolution / Accuracy	$0.01pH/\pm0.01pH$	$0.01$ pH / $\pm 0.01$ pH	$0.01$ pH / $\pm 0.01$ pH
pH Standard Buffer	USA / NIST	USA / NIST	USA / NIST
pH Calibration	1 or 2 point	1 or 2 point	1 or 2 point
ORP Range	-2000~2000 mV	-2000~2000 mV	-2000~2000mV
Resolution	1 mV	1 mV	1 mV
Accuracy	±1 mV	±1 mV	±1 mV
Temperature Range	-9.9~130.0°C	-9.9~130.0°C	-9.9~130.0°C
Resolution / Accuracy	0.1°C / ±0.5°C	0.1°C / ±0.5°C	0.1°C / ±0.5°C
Temperature Sensor	PT1000	PT1000	PT1000
Temperature Compensation	Auto / Manual	Auto / Manual	Auto / Manual
pH Electrode	Standard pH or	Standard pH or	Standard pH or
pri Electrode	Antimony electrode	Antimony electrode	Antimony electrode
Signal Input	Symmetrical / Asymmetrical	Symmetrical / Asymmetrical	Symmetrical / Asymmetrical
Analog Output	0 / 4~20 mA	0 / 4~20 mA	0 / 4~20 mA
Serial Interface	_	RS-485	RS-485
Relay Specification	2 SPST / 250V 1A	3 SPST / 250V 1A	3 SPST / 250V 1A
Frequency of Cleaning Time	_	1~999hours / 1~999sec	1~999hours / 1~999sec
Control hysteresis band	0.01~2.00 pH / 1~200 mV	0.01~2.00pH / 1~200mV	0.01~2.00pH / 1~200mV
EMC Standard	EN50081-1 / EN50082-1	EN50081-1 / EN50082-1	EN50081-1 / EN50082-1
Operation Temperature	-10.0~50.0°C (14.0~122.0°F)	-10.0~50.0°C (14.0~122.0°F)	-10.0~50.0°C (14.0~122.0°F)
Operation Humidity	10~95%	10~95%	10~95%
Power Supply	220 / 110 VAC	220 / 110 VAC	220 / 110 VAC
Size / Weight	100x108x150mm / 900g	100x108x150mm / 900g	190x160x133mm / 1.5Kg
Installation Size	93.5x93.5mm	93.5x93.5mm	_
Electrodes / Accessories		See P.36	

Conductivity / TDS / Salinity Controller



#### **Feature**

- **X** Application: For monitoring of Industrial Process and Pure water conductivity/resistivity.
- X Panel or Wall mounts Enclosures, NEMA4X, IP65 waterproof, dust proof.
- \* Provide precise measurement at industrial site or water treatment process.
- **X** Symmetric signal output interface, preventing electromagnetic interference.
- ※ Scaleable isolated output: 0/4~20mA.

- X Two level password protections prevent unauthorized of setting.
- **X** Large LCD with background illumination screen.
- \* Two separate mechanical relays for high and low (HH/HL/LL) setpoints.
- X Separately adjustable high and low set-point hysteresis (dead bands) prevent chattering of relays around the
- \* The third mechanical relays for electrode self-cleaning or alarm.

# CON5000



# CON5500



$ \begin{array}{c} \textbf{Conductivity Range} & 0.000 \sim 3.000 \ / \ 30.00 \ / \ 30.00 \ / \ 300.0 \ u S \ / cm \\ 0.000 \sim 3.000 \ / \ 30.00 \ / \ 300.0 \ u S \ / cm \\ 0.000 \sim 3.000 \ / \ 30.00 \ / \ 300.0 \ u S \ / cm \\ 0.000 \sim 3.000 \ / \ 30.00 \ / \ 300.0 \ u S \ / cm \\ \textbf{TDS Range} & 0.3 \sim 30.0 \ M \Omega^* cm \ / \ 3 \sim 30.0 \ M \Omega^* cm \\ 0.000 \sim 3.000 \ / \ 30.00 \ / \ 300.0 \ p m \ / \\ 0.000 \sim 3.000 \ / \ 30.00 \ / \ 300.0 \ p m \ / \\ 0.000 \sim 3.000 \ / \ 30.00 \ / \ 300.0 \ p m \ / \\ \textbf{Resolution} & 0.001 \ / \ 0.01 \ / \ 0.1 \ u S \ / cm, 0.001 \ / \ 0.1 \ u S \ / cm, 0.001 \ / \ 0.1 \ u S \ / cm, 0.001 \ / \ 0.1 \ u S \ / cm \ / \ 0.1 \ u S \ / \ u S \ / \ 0.1 \ u S \ / \ u S \ / \ 0.1 \ u S \ / \ u S \$	/cm m
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	m
$ \begin{array}{llllllllllllllllllllllllllllllllllll$	
TDS Range $0.000 \sim 3.000 / 30.00 / 300.0 \text{ppt}$ $0.000 \sim 3.000 / 30.00 / 300.0 \text{ppt}$ Resolution $0.001 / 0.01 / 0.1 \text{uS/cm}, 0.001 / 0.01$ $0.001 / 0.01 / 0.1 \text{uS/cm}, 0.001 / 0.1 \text{uS/cm}, 0.001 / 0.1 \text{uS/cm}, 0.1 \text{M}Ω*cm}$ Accuracy $\pm 1\% \text{F.S.}$ $\pm 1\% \text{F.S.}$ Temperature Range $-5.0 \sim 130.0^{\circ}\text{C}$ $-5.0 \sim 130.0^{\circ}\text{C}$	m /
$ \begin{array}{c} 0.000 \sim 3.000 / \ 30.00 / \ 30.00 / \ 300.0 ppt \\ 0.001 / \ 0.01 / \ 0.1 uS / cm, 0.001 / \ 0.01 \\ 0.1 mS / cm, \ 0.1 M \Omega^* cm \\  \end{array} \\ \begin{array}{c} 0.001 / \ 0.01 / \ 0.1 uS / cm, 0.001 / \ 0.001 /$	-
Resolution       0.1mS/cm, 0.1MΩ*cm       0.1mS/cm, 0.1MΩ*cm         Accuracy       ±1%F.S.       ±1%F.S.         Temperature Range       -5.0~130.0°C       -5.0~130.0°C	t
0.1mS/cm, 0.1MΩ*cm       0.1mS/cm, 0.1MΩ*cm         Accuracy $\pm 1\%$ F.S. $\pm 1\%$ F.S.         Temperature Range $-5.0 \sim 130.0$ °C $-5.0 \sim 130.0$ °C	0.01
Temperature Range -5.0~130.0°C -5.0~130.0°C	
Resolution / Accuracy $0.1^{\circ}\text{C} / \pm 0.5^{\circ}\text{C}$ $0.1^{\circ}\text{C} / \pm 0.5^{\circ}\text{C}$	
Cell Constant K=0.01/0.1/1/10 K=0.01/0.1/1/10	
(With specified electrode) (With specified electrode)	
Temperature Sensor PT1000 PT1000	
<b>Analog Output</b> 0 / 4~20 mA 0 / 4~20 mA	
Serial Interface RS-485 RS-485	
Relay Specification 3 SPST / 250V 1A 3 SPST / 250V 1A	
Frequency of Cleaning Time 1~999hours / 1~999sec 1~999hours / 1~999sec	
Control hysteresis band 0.1~10%F.S. 0.1~10%F.S.	
<b>EMC Standard</b> EN50081-1 / EN50082-1 EN50081-1 / EN50082-1	
Operation Temperature -10.0~50.0°C (14.0~122.0°F) -10.0~50.0°C (14.0~122.0°F)	
Operation Humidity 10~95% 10~95%	
Power Supply 220 / 110 VAC 220 / 110 VAC	
Size / Weight         100x108x150mm / 900g         190x160x133mm / 1.5kg	
Installation Size 93.5x93.5mm —	
Electrodes / Accessories See P.36	



Dissolved Oxygen Controller

#### **Feature**

- ※ Applications: Ranging from water treatment monitoring to Pharmaceutical and Food processing Industries.
- \*\* Panel or Wall mounts Enclosures, NEMA4X, IP65 water proof, dust proof.
- X Provide precise measurement at industrial site or water treatment process.
- Symmetric signal output interface, preventing electromag netic interference.
- ※ Scaleable isolated output: 0/4~20mA.

- \*\* Two level password protections prevent unauthorized of setting.
- \* Large LCD with background illumination screen.
- Two separate mechanical relays for high and low (HH/HL/LL) setpoints.
- ※ Separately adjustable high and low set-point hysteresis (dead bands) prevent chattering of relays around the set point.
- \*\* The third mechanical relays for electrode self-cleaning or alarm.

# DO5000



# DO5200



# DO5500



Specifications	DO5000	DO5200	DO5500
Range	0.00~40.00 mg/L	0.00~40.00 mg/L	0.00~40.00 mg/L
9-	0.0~400.0%	0.0~400.0%	0.0~400.0%
Resolution / Accuracy	0.01ppm, 0.1% / ±2%F.S.	0.01ppm, 0.1% / ±2%F.S.	0.01ppm, 0.1% / ±2%F.S.
Calibration	1 point (100% Saturated) or	1 point (100% Saturated) or	1 point (100% Saturated) or
	2 point (100% and 0% Saturated)	2 point (100% and 0% Saturated)	2 point (100% and 0% Saturated)
Temperature Range	-5.0 ~ 100.0°C	-5.0 ~ 100.0°C	-5.0 ~ 100.0°C
Temperature Compensation	Auto / Manual	Auto / Manual	Auto / Manual
Resolution/Accuracy	0.1°C/±0.5°C	0.1°C/±0.5°C	0.1°C/±0.5°C
Electrode Type	Galvanic / Clark	Galvanic / Clark	Galvanic / Clark
Salinity Compensation	0.0~45.2 ppt	0.0~45.2 ppt	0.0~45.2 ppt
Control Type	ON/OFF Control (LIT)	ON/OFF Control (LIT)	ON/OFF Control (LIT)
Analog Output	0 / 4~20 mA	0 / 4~20 mA	0 / 4~20 mA
Serial Interface	RS-485	RS-485	RS-485
Relay Specification	3 SPST / 250V 1A	3 SPST / 250V 1A	3 SPST / 250V 1A
Frequency of Cleaning Time	1~999hours / 1~999 sec	1~999hours / 1~999 sec	1~999hours / 1~999 sec
Control Hysteresis Band	0.01~2.00ppm / 0.1~20%	0.01~2.00ppm / 0.1~20%	0.01~2.00ppm / 0.1~20%
Temperature System	NTC22K	NTC22K	NTC22K
EMC Standard	EN50081-1 / EN50082-1	EN50081-1 / EN50082-1	EN50081-1 / EN50082-1
Operation Temperature	-10.0~50.0°C (14.0~122.0°F)	-10.0~50.0°C (14.0~122.0°F)	-10.0~50.0°C (14.0~122.0°F)
Operation Humidity	10~95%	10~95%	10~95%
Pipeline Pressure Compensation	<u> </u>	0.00~4.00 Kg	0.00~4.00 Kg
<b>Liquid Depth Compensation</b>	_	0.0~10.0 m	0.0~10.0 m
Power Supply	220 / 110 VAC	220 / 110 VAC	220 / 110 VAC
Size / Weight	100x108x150mm / 900g	100x108x150mm / 900g	190x160x133mm / 1.5Kg
Installation Size	93.5x93.5mm	93.5x93.5mm	_
Electrodes / Accessories		See P.36	

Free Chlorine Controller



#### **Feature**

- \* Applications: Widely used in food & beverage, bottling, drinking water, wastewater, scrubbers, pulp & paper, RO systems, swimming pools, therapy pools and aquariums.
- X Use three-electrode sensor to measure free chlorine faster and accurate, matching up to DPD result. Panel mounted type.
- \* Measureed value not affected by low temperature or turbidity.
- X Panel or Wall mounts Enclosures, NEMA4X, IP65 water proof, dust proof.
- \* Provide precise measurement at industrial site or water treatment process.
- \* Large LCD with background illumination screen.

- \* Symmetric signal output interface, preventing electromagnetic interference.
- X Scaleable isolated output: 0/4~20mA. €
- **X** Two level password protections prevent unauthorized of setting.
- \* Two separate mechanical relays for high and low (HH/HL/LL) setpoints.
- **X** Separately adjustable high and low set-point hysteresis (dead bands) prevent chattering of relays around the set point.
- \* The third mechanical relays for electrode self-cleaning or alarm.

# FCL5000



# FCL5500



Specifications	FCL5000	FCL5500
Range	0.000~2.000ppm / 0.00~20.00ppm	0.000~2.000ppm / 0.00~20.00ppm
Resolution	0.001ppm / 0.01ppm	0.001ppm / 0.01ppm
Accuracy	±2%F.S.	±2%F.S.
Calibration	1 point (0%) or 2 point (0% and DPD Value)	1 point (0%) or 2 point (0% and DPD Value)
Temperature Range	-5.0~100.0°C	-5.0~130.0°C
Resolution/Accuracy	0.1°C/±0.5°C	0.1°C/±0.5°C
Electrode Type	Three-electrode sensor	Three-electrode sensor
Analog Output	0 / 4~20 mA	0 / 4~20 mA
Serial Interface	RS-485	RS-485
Relay Specification	3 SPST / 250V 1A	3 SPST / 250V 1A
Frequency of Cleaning Time	1~999hours / 1~999 sec	1~999hours / 1~999 sec
Control Hysteresis Band	0.01~2.00ppm / 0.1~20.0%	0.01~2.00pH / 1~200mVA
Temperature System	NTC22K	NTC22K
EMC Standard	EN50081-1 / EN50082-1	EN50081-1 / EN50082-1
Operation Temperature	-10.0~50.0°C (14.0~122.0°F)	-10.0~50.0°C (14.0~122.0°F)
Operation Humidity	10~95%	10~95%
Power Supply	220 / 110 VAC	220 / 110 VAC
Size/Weight	100x108x150mm / 900g	190x160x133mm / 1.5Kg
Installation Size	93.5x93.5mm	_
Flacturals - / A		D27

**Electrodes / Accessories** See P.37





Ozone Controller

#### **Feature**

- ※ Applications: Widely used in food & beverage, bottling, drinking water, wastewater, scrubbers, pulp & paper, RO systems, swimming pools, therapy pools and aquariums.
- W Use three-electrode sensor to measure free chlorine faster and accurate, matching up to DPD result. Panel mounted type.
- \* Measureed value not affected by low temperature or turbidity.
- ※ Panel or Wall mounts Enclosures, NEMA4X, IP65 waterproof, dust proof.
- \* Large LCD with background illumination screen.

- Symmetric signal output interface, preventing electromagnetic interference.
- ※ Scaleable isolated output: 0/4~20mA.
- \* Two level password protections prevent unauthorized of setting.
- Two separate mechanical relays for high and low (HH/HL/LL) setpoints.
- Separately adjustable high and low set-point hysteresis
   (dead bands) prevent chattering of relays around the
   set point.
- \*\* The third mechanical relays for electrode self-cleaning or alarm.

# DOZ5000



# DOZ5500



Specifications	FCL5000	FCL5500		
Range	0.000~2.000ppm / 0.00~20.00ppm	0.000~2.000ppm / 0.00~20.00ppm		
Resolution	0.001ppm / 0.01ppm	0.001ppm / 0.01ppm		
Accuracy	± 2%F.S.	±2%F.S.		
Calibration	1 point (0%) or 2 point (0% and DPD Value)	1 point (0%) or 2 point (0% and DPD Value)		
Temperature Range	-5.0~100.0°C	-5.0~100.0°C		
Resolution/Accuracy	0.1°C/±0.5°C	0.1°C/±0.5°C		
Electrode Type	Three-electrode sensor	Three-electrode sensor		
Analog Output	0 / 4~20 mA	0 / 4~20 mA		
Serial Interface	RS-485	RS-485		
Relay Specification	3 SPST / 250V 1A	3 SPST / 250V 1A		
Control Hysteresis Band	1 ~ 999hours / 1 ~ 999 sec	1 ~ 999hours / 1 ~ 999 sec		
Frequency of Cleaning Time	0.01~2.00ppm / 0.1~20.0%	0.01~2.00pH/1~200mVA		
Temperature System	NTC22K	NTC22K		
EMC Standard	EN50081-1 / EN50082-1	EN50081-1 / EN50082-1		
Operation Temperature	-10.0~50.0°C (14.0~122.0°F)	-10.0~50.0°C (14.0~122.0°F)		
Operation Humidity	10~95%	10~95%		
Power Supply	220 / 110 VAC	220 / 110 VAC		
Size/Weight	100x108x150mm / 900g	190x160x133mm / 1.5Kg		
Installation Size	93.5x93.5mm	_		
	Con D27			

Electrodes / Accessories See P.37

pH / ORP Controller



#### **Feature**

- **X** Application : For monitoring of Industrial Process, Wastewater measurements, Pharmaceutical, Chemical and Food & Beverage industries.
- X Panel or Wall mounts Enclosures, NEMA4X, IP65 waterproof, dust proof.
- **X** Providing grounding function, prevent sample charged interference.
- **X** Large LCD with background illumination screen.

- \* Password protections prevent unauthorized of setting.
- ※ Scaleable isolated output: 0/4~20mA.
- \* Two separate mechanical relays for high and low (HH/HL/LL) setpoints.
- **X** Separately adjustable high and low set-point hysteresis (dead bands) prevent chattering of relays around the set point.

# PH 6000







Specifications	PH6000		
pH Range	0.00~14.00pH		
pH Resolution /Accuracy	0.01pH / ±0.01 pH±1Digit		
ORP Range	-1999∼+1999 mV		
ORP Resolution	1 mV		
ORP Accuracy	±0.1%±1Digit		
Temperature Range	-10.0~110.0°C		
Temperature Resolution /Accuracy	0.1°C / ±0.2°C±1Digit		
Temperature Compensation	Auto: Pt1000 / NTC30K; Manual		
Signal Input	>10 <sup>12</sup> Ω		
Analog Output	2 sets 0/4~20mA		
Relay Specification	2 SPST / 240VAC 0.5A		
Operation Temperature	0~50°C		
Power supply	100~240VAC±10% · 50/60Hz		
Size/Weight	144mmx144mmx115mm / 800g		
Installation Size	138mmx138mm		
Electrodes / Accessories	See P.36		



pH / ORP Controller

#### **Feature**

- **X** Application: For monitoring of Industrial Process, Wastewater measurements, Pharmaceutical, Chemical and Food & Beverage industries.
- **X Panel or Wall mounts Enclosures, NEMA4X, IP65** waterproof, dust proof.
- **X** Providing grounding function, prevent sample charged interference.
- **X** Large LCD with Auto/Manual background illumination
- \* Password protections prevent unauthorized of setting.

- **X RS-485** interface communication (PH6300 \ PH6400 ).
- \* Scaleable isolated output: 0/4~20mA.
- \* Two separate mechanical relays for high and low (HH/HL/LL) setpoints.
- **X** Separately adjustable high and low set-point hysteresis (dead bands) prevent chattering of relays around the set point.
- \* The third mechanical relays for electrode self-cleaning or alarm.

PH 6100

PH 6200

PH 6300

PH 6400







Specifications	PH 6100	PH 6200	PH 6300	PH 6400
pH Range	-2.00~16.00pH			
pH Resolution / Accuracy		0.01pH / ±0.01	l pH±1Digit	
ORP Range		-1999~+1	.999 mV	
ORP Resolution		1 m	V	
ORP Accuracy		±0.1%±	1Digit	
Temperature Range		-30.0~1	30.0°C	
Temperature Resolution / Accuracy	0.1°C / ±0.2°C±1Digit			
Temperature Compensation	Auto: Pt1000/NTC30K; Manual			
Signal Input	>10 <sup>12</sup> Ω			
Analog Output	2 sets 0/4~20mA		1 set 0/4~20mA	
Serial Interface	_		RS-485	
Relay Specification		2 SPST / 240	OVAC 0.5A	
Frequency of Cleaning Time		ON 0~9999 sec / O	FF 0~999.9 hours	
Operation Temperature		0~50		
Power supply	100~240VAC±10% · 100~240VAC±10% · 20~30VDC 50/60Hz 20~30VDC			
Size/Weight	144mmx144mmx115mm / 800g			
Installation Size	138mmx138mm			
Electrodes / Accessories		See F	239	

Conductivity / TDS / Salinity Controller



#### **Feature**

- **X** Application: For monitoring of Industrial Process and Pure water conductivity/resistivity.
- **X With 4-Electrode Conductivity Sensor.**
- **X** Panel or Wall mounts Enclosures, NEMA4X, IP65 waterproof, dust proof.
- **X** Providing grounding function, prevent sample charged interference.
- **X** Large LCD with Auto/Manual background illumination
- \* Password protections prevent unauthorized of setting.

- **X RS-485** interface communication (CON6300 \ CON6400 ).
- X Scaleable isolated output: 0/4~20mA.
- \* Two separate mechanical relays for high and low (HH/HL/LL) setpoints.
- **X** Separately adjustable high and low set-point hysteresis (dead bands) prevent chattering of relays around the set point.
- \* The third mechanical relays for electrode self-cleaning or alarm.

**CON 6100** 

**CON 6200** 

**CON 6300** 

**CON 6400** 







Specifications	CON 6100	CON 6200	CON 6300	CON 6400
Conductivity Range	0.000uS/cm~200.0mS/cm			
Conductivity Resolution		0.001	uS/cm	
Resistivity Range		0.00M%*cm~	<sup>2</sup> 0.00M%*cm	
Resistivity Resolution		0.01M	1%*cm	
Salinity Range		0.0ppt~	70.0ppt	
Salinity Resolution		0.1	ppt	
Accuracy		±0.1%:	±1Digit	
Temperature Range	-30.0~130.0°C			
Temperature Resolution/Accuracy	0.1°C / ±0.2°C±1Digit			
Cell Constant	0.01,	0.1, 1, 10.00 1/cm or 0	.0050~19.99 1/cm adju	stable
Temperature Compensation		Auto: Pt1000/NTC30	K ; Manual : Nonlinear	
Temperature Constant	Conductivity	Linear (0.00%~20.00%	) or Nonlinear ; Resistiv	ity : Nonlinear
Analog Output	2 sets 0/4~20mA		1 sets 0/4~20mA	
Serial Interface	_		RS-485	
Relay Specification		2SPST / 24	10VAC 0.5A	
Frequency of Cleaning Time		ON 0~9999 sec / 0	OFF 0~999.9 hours	
Operation Temperature		0~5	50°C	
Power Supply	100~240VAC±10% · 100~240VAC±10% · 20~30VDC 50/60Hz 20~30VDC			
Size / Weight	144mmx144mmx115mm / 800g			
Installation Size	138mmx138mm			
Electrodes / Accessories	See P.36			



Dissolved Oxygen Controller

#### **Feature**

- \* Applications : Ranging from water treatment monitoring to Pharmaceutical and Food processing Industries.
- **X With Optical Dissolved Oxygen Sensor.**
- **X** Panel or Wall mounts Enclosures, NEMA4X, IP65 water proof, dust proof.
- \* Providing grounding function, prevent sample charged interference.
- **X** Large LCD with Auto/Manual background illumination screen.
- \* Password protections prevent unauthorized of setting.

- **X RS-485** interface communication (LDO6300 \ LDO6400 ).
- \* Scaleable isolated output: 0/4~20mA.
- \* Two separate mechanical relays for high and low (HH/HL/LL) setpoints.
- **X** Separately adjustable high and low set-point hysteresis (dead bands) prevent chattering of relays around the set
- \* The third mechanical relays for electrode self-cleaning or alarm.

**LDO 6100** 

**LDO 6200** 

**LDO 6300** 

**LDO 6400** 







Specifications	LDO 6100	LDO 6200	LDO 6300	LDO 6400	
Range	0~200%, 0.00~19.99 mg/L, 0.00~19.99 ppm				
Resolution	0	0.01% , 0.01 mg/L , 0.01	ppm		
Accuracy		±3%±1Digit of readir	ng		
Temperature Range		-30.0~130.0°C			
Temperature Resolution / Accuracy		0.1°C / ±0.2°C±1Dig	it		
Temperature Compensation	Auto				
Pressure Compensation	0.500~2.500bar or 7.25~36.25psi Manual				
Analog Output	2 sets 0/4~20mA 1 set 0/4~20mA				
Serial Interface	_		RS-485		
Relay Specification		2SPST / 240VAC 0.5/	4		
Frequency of Cleaning Time	ONO	~9999 sec / OFF 0~999	9.9 hours		
Operation Temperature		0~50°C			
Power Supply	100~240VAC±10% · 50/60Hz	20~30VDC	100~240VAC±10% · 50/60Hz	20~30VDC	
Size / Weight	144mmx144mmx115mm / 800g				
Installation Size	138mmx138mm				
Electrodes / Accessories		See P.38			

Dissolved Oxygen Controller



#### **Feature**

- \* Applications : Ranging from water treatment monitoring to Pharmaceutical and Food processing Industries.
- **X** Panel or Wall mounts Enclosures, NEMA4X, IP65 water proof, dust proof.
- **X** Providing grounding function, prevent sample charged interference.
- **X** Large LCD with Auto/Manual background illumination
- \* Password protections prevent unauthorized of setting.

- **X RS-485** interface communication (DO6300 \ DO6400 ).
- ※ Scaleable isolated output: 0/4~20mA.
- \* Two separate mechanical relays for high and low (HH/HL/LL) setpoints.
- **X** Separately adjustable high and low set-point hysteresis (dead bands) prevent chattering of relays around the set
- \* The third mechanical relays for electrode self-cleaning or alarm.

**DO 6100** 

**DO 6200** 

**DO 6300** 

**DO 6400** 







Specifications	DO 6100	DO 6200	DO 6300	DO 6400
Range	0~200%, 0.00~19.99 mg/L, 0.00~19.99 ppm			
Resolution		0.01% , 0.01 mg	J/L , 0.01 ppm	
Accuracy		±0.5% of read	ing ±1Digit	
Temperature Range		-30.0~130.0°C ( de	pands on sensor )	
Temperature Resolution / Accuracy		0.1°C / ±0.2	°C±1Digit	
Pressure Compensation	Auto: 0~50 NTC30K/NTC22K; Manual			
Salinity Compensation	0.0~45.0ppt			
Pressure Compensation	0.500~2.500bar or 7.25~36.25psi Manual			
Analog Output	2 sets 0/4~20mA		1 set 0/4~20mA	
Serial Interface	_		RS-485	
Relay Specification	2SPST / 240VAC 0.5A			
Frequency of Cleaning Time		ON 0~9999 sec / O	FF 0~999.9 hours	
Operation Temperature		0~50	)°C	
Power Supply	100~240VAC±10% · 50/60Hz	20~30VDC	100~240VAC±10% · 50/60Hz	20~30VDC
Size / Weight	144mmx144mmx115mm / 800g			
Installation Size	138mmx138mm			
Electrodes / Accessories	See P.37			





ION Controller

#### **Feature**

- **X** Application: For monitoring of Industrial Process, Wastewater measurements, Pharmaceutical, Chemical and Food & Beverage industries.
- \* Panel or Wall mounts Enclosures, NEMA4X, IP65 water proof, dust proof.
- **X** Providing grounding function, prevent sample charged interference.
- X Large LCD with Auto/Manual background illumination screen.
- X Password protections prevent unauthorized of setting.

- **X RS-485** interface communication (ION6300 \ ION6400 ).
- X Scaleable isolated output: 0/4~20mA. € Scaleable isolated output: 0/4~20mA.
- **X** Two separate mechanical relays for high and low (HH/HL/LL) setpoints.
- X Separately adjustable high and low set-point hysteresis (dead bands) prevent chattering of relays around the
- \* The third mechanical relays for electrode self-cleaning or alarm.



# **ION 6200**











Specifications	ION 6100	ION 6200	ION 6300	ION 6400
Range	0.00~1999.9(ppm · mg/L) / -1999.9~1999.9mV			
Resolution	1/0.1/0.01(ppm \ mg/L) / 0.1mV			
Accuracy		±0.06%±	±1Digit	
Temperature Range		-30.0~1	.30.0°C	
Temperature Resolution / Accuracy		0.1°C / ±0.2	2°C±1Digit	
Reproducibility	±0.	$05\%$ / $\pm 10\%$ of reading (	depends on ISE or samp	ole)
Average Time Signals	0~60 sec adjustable / preset30			
Temperature Compensation	Auto : Pt1000/ NTC30K ; Manual			
Calibration	2-3 points · Offset value (13 section optional)			
Signal Input		>10	<sup>12</sup> Ω	
Analog Output	2 sets 0/4~20mA		1 set 0/4~20mA	
Serial Interface	_		RS-485	
Relay Specification		2SPST / 24	0VAC 0.5A	
Frequency of Cleaning Time		ON 0~9999 sec / 0	OFF 0~999.9 hours	
Operation Temperature	0~50°C			
Power Supply	100~240VAC±10% 50/60Hz	20~30VDC	100~240VAC±10%· 50/60Hz	20~30VDC
Size / Weight	144mmx144mmx115mm / 800g			
Installation Size	138mmx138mm			

Turbidity / SS / MLSS Controller



#### **Feature**

- X Application: Water and wastewater treatment, drinking water and surface water monitoring, chemical process, recycling water, and scrubber.
- × 90-degree of the optical detection principle.
- X Color and bubbles without interference, build in self-clean system.
- × 5-points calibration, single-point calibration can be analyzed based on laboratory or field.
- \* Stainless steel housing and hard to scratch lenses.
- X Panel or Wall mounts Enclosures, NEMA4X, IP65 water proof, dust proof.
- **X** Providing grounding function, prevent sample charged interference.

- **X** Large LCD with Auto/Manual background illumination
- \* Password protections prevent unauthorized of setting.
- **X RS-485** interface communication (TS6300 \ TS6400 ).
- X Scaleable isolated output: 0/4~20mA. €
- \* Two separate mechanical relays for high and low (HH/HL/LL) setpoints.
- X Separately adjustable high and low set-point hysteresis (dead bands) prevent chattering of relays around the set point.
- \* The third mechanical relays for electrode self-cleaning or alarm.

**TS 6100** 

**TS 6200** 

**TS 6300** 

TS 6400







Specifications	TS 6100	TS 6200	TS 6300	TS 6400	
Range		Turbidity / Suspended	Solid(SS) / (MLSS)		
Turbidity Unit		NTU , FTL	J , FNU		
SS Unit		ppm , r	ng/L		
MLSS Unit		g/L	-		
Turbidity Range	0.00~20.00, 20.0	0~100.0 / 0.0~200.0 , 200~	500 / 0~3000 NTU ( depand	s on sensor )	
SS Range		0~1000	mg/L		
MLSS Range	0.0~50.0 g/L				
Resolution		Auto (0.01	, 0.1 , 1)		
Analog Output	2 sets 0/4~20mA		1 set 0/4~20mA		
Serial Interface	_		RS-485		
Relay Specification		2SPST / 240	VAC 0.5A		
Frequency of Cleaning Time		ON 0~9999 sec / Ol	FF 0~999.9 hours		
Operation Temperature		0~50	°C		
Power Supply	100~240VAC±10% ·	20~30VDC	100~240VAC±10% ·	20~30VDC	
	50/60Hz	201-30100	50/60Hz	20-3000	
Size / Weight	144mmx144mmx115mm / 800g				
Installation Size	138mmx138mm				
Electrodes / Accessories	See P.39				





SS / MLSS Controller

#### **Feature**

- \* Application: Water and wastewater treatment, drinking water and surface water monitoring, chemical process, recycling water, and scrubber.
- \* Infrared optical detection principle.
- **X** Color and bubbles without interference, build in self-clean system.
- X Single-point calibration can be analyzed based on laboratory or field.
- X Stainless steel housing and hard to scratch lenses.
- \* Panel or Wall mounts Enclosures, NEMA4X, IP65 water proof, dust proof.
- X Providing grounding function, prevent sample charged interference.

- **X** Large LCD with Auto/Manual background illumination
- \* Password protections prevent unauthorized of setting.
- **X RS-485** interface communication (SS6300 \ SS6400 ).
- X Scaleable isolated output: 0/4~20mA.
- \* Two separate mechanical relays for high and low (HH/HL/LL) setpoints.
- \* Separately adjustable high and low set-point hysteresis (dead bands) prevent chattering of relays around the set point.
- \* The third mechanical relays for electrode self-cleaning or alarm.

SS 6100

**MLSS 6100** 

SS 6200

**MLSS 6200** 

SS 6300

SS 6400

MLSS 6300

**MLSS 6400** 







Specifications	SS 6100 ( MLSS 6100 )	SS 6200 (MLSS 6200)	SS 6300 ( MLSS 6300 )	SS 6400 ( MLSS 6400 )
Mode	Suspended Solid(SS) / (MLSS)			
SS Unit		ppm , m	ıg/L	
MLSS Unit		mg/L , o	g/L	
Range	SS:0~19	999 mg/L ; MLSS:0~199	999 mg/L , 20.00 g/L~150.	.00 g/L
Resolution	SS:1 mg,	/L ; MLSS : Auto	(1 mg/L , 0.01 g/L)	
Analog Output	2 sets 0/4~20mA		1 set 0/4~20mA	
Serial Interface	_		RS-485	
Relay Specification		2SPST / 240\	/AC 0.5A	
Frequency of Cleaning Time	ON 0~9999 sec / OFF 0~999.9 hours			
Operation Temperature	0~50°C			
Dower Cupply	100~240VAC±10% ·	20~30VDC	100~240VAC±10% ·	20~30VDC
Power Supply	50/60Hz	201-30VDC	50/60Hz	201-30VDC
Size / Weight	144mmx144mmx115mm / 800g			
Installation Size	138mmx138mm			
Electrodes / Accessories		See P.3	39	

**Turbidity Controller** 



#### **Feature**

- \* Application : Water and wastewater treatment, drinking water and surface water monitoring, chemical process, recycling water, and scrubber.
- X Infrared optical detection principle.
- **X** Color and bubbles without interference, build in self-clean system.
- × 5-points calibration, single-point calibration can be analyzed based on laboratory or field.
- X Stainless steel housing and hard to scratch lenses.
- \* Panel or Wall mounts Enclosures, NEMA4X, IP65 water proof, dust proof.
- **X** Providing grounding function, prevent sample charged interference.

- **X** Large LCD with Auto/Manual background illumination
- \* Password protections prevent unauthorized of setting.
- **X RS-485** interface communication (TU6300 \ TU6400 ).
- ※ Scaleable isolated output: 0/4~20mA.
- \* Two separate mechanical relays for high and low (HH/HL/LL) setpoints.
- X Separately adjustable high and low set-point hysteresis (dead bands) prevent chattering of relays around the
- \* The third mechanical relays for electrode self-cleaning or alarm.

**TU 6100** 

**TU 6200** 

**TU 6300** 

**TU 6400** 







Specifications	TU 6100	TU 6200	TU 6300	TU 6400	
Mode	Turbidity				
Unit		NTU , FTI	J , FNU		
Range		0.00~20.00 , 20.0~20	0.0 , 200~5000 NTU		
Resolution	AUTO(0.01 , 0.1 , 1)				
Analog Output	2 sets 0/4~20mA		1 set 0/4~20mA		
Serial Interface	— RS-485				
Relay Specification	2SPST / 240VAC 0.5A				
Frequency of Cleaning Time		ON 0~9999 sec / O	FF 0~999.9 hours		
Operation Temperature		0~50	)°C		
Power Supply	100~240VAC±10% · 50/60Hz	20~30VDC	100~240VAC±10%· 50/60Hz	20~30VDC	
Size / Weight	144mmx144mmx115mm / 800g				
Installation Size	138mmx138mm				
Electrodes / Accessories		See F	2.39		





Free Chlorine Controller

#### **Feature**

- X Applications: Widely used in food & beverage, bottling, drinking water, wastewater, scrubbers, pulp & paper, RO systems, swimming pools, therapy pools and aquariums.
- **X** Connect pH sensor for pH compensation at the same
- **X** Panel or Wall mounts Enclosures, NEMA4X, IP65 water proof, dust proof.
- X Providing grounding function, prevent sample charged interference.
- X Large LCD with Auto/Manual background illumination screen.

- \* Password protections prevent unauthorized of setting.
- **X RS-485** interface communication (CH6300 \ CH6400 ).
- X Scaleable isolated output: 0/4~20mA. €
- X Two separate mechanical relays for high and low (HH/HL/LL) setpoints.
- X Separately adjustable high and low set-point hysteresis (dead bands) prevent chattering of relays around the set point.
- \* The third mechanical relays for electrode self-cleaning or alarm.

**CH 6100** 

CH 6200

CH 6300

**CH 6400** 







Specifications	CH 6100	CH 6200	CH 6300	CH 6400			
Mode	Residual(Free) Chlorine / pH / Temperature						
FCL Range	0.00~10.00ppm(mg/L)						
FCL Resolution / Accuracy	0.01ppm(mg/l) / ±0.5%±1Digit						
pH Range	0.00~14.00pH						
pH Resolution / Accuracy	0.01pH / ±0.01pH±1Digit						
Temperature Range	-30.0~130.0°C						
Temperature Resolution / Accuracy	0.1°C / ±0.5%±1Digit						
Temperature Compensation	NTC30K / PT1000 / Manual						
Storage temperature	-20~70°C						
Analog Output	2 sets 0/4~20mA 1 set 0/4~20mA						
Serial Interface	_	— RS-485					
Relay Specification	2SPST / 240VAC 0.5A / PID control optional						
Flow Control	Flow control sensor (optional)						
Frequency of Cleaning Time	ON 0~9999 sec / OFF 0~999.9 hours						
Operation Temperature	0~50°C						
Power Supply	100~240VAC±10% · 50/60Hz	20~30VDC	100~240VAC±10% · 50/60Hz	20~30VDC			
Size / Weight	144mmx144mmx115mm / 800g						
Installation Size	138mmx138mm						
Electrodes / Accessories	See P.38						

# **Laboratory Electrodes / Accessories**

pH/ORP



# **Laboratory pH Electrodes**

#### CS1210

Type: 2 in 1 pH electrode Material: PVC Test Range: 0 ~ 14pH Temperature Range: 0 ~ 60°C Juction: Ceramic Juction Reference System: Ag/AgCl Electrolyte: 3mol KCL+AgCl Cable:1M/BNC



#### CS1010

Type: 2 in 1 pH electrode Material: PPS Test Range: 0 ~ 14pH Temperature Range: 0 ~ 80°C Juction: Ceramic Juction Reference System: Ag/AgCl Electrolyte: 3 mol KCL+AqCl Cable:1M/BNC



#### CS1030

Type: 3 in 1 pH electrode Material: PPS Test Range: 0 ~ 14pH Temperature Range: 0 ~ 80°C Juction: Ceramic Juction Temperature System: NTC22K Reference System: Ag/AgCl Electrolyte: 3mol KCL+AgCl Cable:1M/BNC



#### CS1130

Type: pH electrode Material: Glass Test Range: 0 ~ 14pH Temperature Range: 0 ~ 80°C Juction: Ceramic Juction Temperature System: NTC22K Reference System: Ag/AgCl Electrolyte: 3mol KCL+AgCl Cable:1M/BNC



#### CS1050

Type: 2 in 1 pH electrode Material: PPS Test Range: 0 ~ 14pH Temperature Range: 0 ~ 80°C Juction: Flat PTFE ring Electrolyte: 3mol KCL+AgCl Cable:1M/BNC



#### CS1111

Type: pH pure water electrode Material: Glass Test Range: 2 ~ 12pH Temperature Range: 0 ~ 60°C Juction: Diaphragm ring Electrolyte: 3mol KCL+AgCl Cable:1M/BNC



#### CS1437

Type: Antimony electrode pH sensor Material: PPS Test Range: 0 ~ 14pH Temperature Range: 0 ~ 80°C Juction: Flat PTFE ring Reference System: Ag/AgCl Cable:1M/BNC



# CT901 (NTC22K)

Type: Temperature probe Material: Stainless steel Temperature Range: -10 ~ 120°C Temperature System: NTC22K

Accuracy: ± 0.5°C Length: 130mm Diameter: Ø4mm Cable: 1M



# **Laboratory ORP Electrodes**

# CS2010

Type: ORP electrode Material: PPS / Platinum Test Range: ±1000mV Temperature Range: 0 ~ 80°C Reference System: Ag/AgCl Juction: Ceramic Juction Electrolyte: 3mol KCL+AgCl Cable:1M/BNC



#### CS2110

Type: ORP electrode Material: Glass / Platinum Test Range: ±1000mV Temperature Range: 0 ~ 80°C Reference System: Ag/AgCl Juction: Ceramic Juction Electrolyte: 3mol KCL+AgCl Cable:1M/BNC







## **Laboratory Conductivity Electrodes / Accessories**

#### CS3000

Type: Conductivity electrode Material: PPS/Graphite Test Range: 0 ~ 50 mS/cm Temperature Range: 0 ~ 80°C Temperature System: NTC22K Cell Constant: K=1.0 Cable: 1M/DIN



#### CS3010

Type: Conductivity electrode Material: PPS/Glass Test Range: 50 ~ 500 mS/cm Temperature Range: 0 ~ 80°C Temperature System: NTC22K Cell Constant: K=10 Cable: 1M/DIN



#### CS3023

Type: Ultra Pure Water Conductivity electrode

Material: Titanium

Test Range: 0.055 ~ 50 uS/cm Temperature Range: 0 ~ 80°C Temperature System: NTC22K Cell Constant: K=0.01

Cable: 1M/DIN



#### A550

Type: Flow Cell for Ultra Pure Water Conductivity electrode

Material: POM Diameter: 1/2"NPT Size: 50x80x180mm



# **Laboratory DO Electrodes / Accessories**

# CS4021L

Type: Galvanic DO electrode Material: PPS / Titanium Test Range: 0 ~ 40 mg/L Temperature System: NTC22K Temperature Range: 0 ~ 60°C





# CS4551L

Type: Clark DO electrode Material: PPS / Titanium Test Range: 0 ~ 40 mg/L Temperature System: NTC22K Temperature Range: 0 ~ 60°C Cable: 3M/DIN



# CS4021-3H1L

Type: Replacement Membrane Kit Membrane Cap: 3 pcs Electrolyte: 1 bottle(30ml)



# CS4551-3H1L

Type: Replacement Membrane Kit Membrane Cap: 3 pcs Electrolyte: 1 bottle(30ml)



# CS4021-1L/5L

Type: Galvanic DO electrode Capacity: 30ml / 500ml For: CS4021L



# CS4551-1L/5L

Type: Clark DO electrode Capacity: 30ml / 500ml For: CS4551L





# CS4021-3H

Type: Galvanic DO Membrane Kit Quantity: 3 pcs



# CS4551-3H

Type: Galvanic DOMembrane Kit Quantity: 3 pcs



# CA-SP5

Type: Sandpaper Quantity: 5 pcs



#### A530

Type: The flow cell for Free Chlorine Tester FCL30



# **Laboratory Electrodes / Accessories**





# ION selective electrodes combination

- **X** These electrodes can be used with any conventional laboratory or portable pH meter with a millvolt mode.
- **X** Combination ISE: Solid, Glass, Gas sensing type ISE.
- \* Mono ISE: Reference electrode required.
- ※ Housing: Glass / Epoxy / PVC, Teflon ∘
- ※ Size: Ø12x120mm ∘
- X Cable: 1M/BNC (Up to 10M optional).
- **X** Standard solution and ISA are available optional.

# **ISE Combination**



Specifications	Description	Concentration(M)	Limits(ppm)	Temperature Range	pH Range
EI-NH4LS	Ammonium(NH <sub>4+</sub> )	0.5~5x10 <sup>-5</sup>	9000~0.9	0~50°C	0~8.5pH
EI-Ba2LS	Barium(Ba <sup>2+</sup> )	10 <sup>-1</sup> ~10 <sup>-5</sup>	13000~1.4	0~50°C	3~10pH
EI-BrLS	Bromide(Br)	1~5x10 <sup>-6</sup>	81000~0.4	5~50°C	1~12pH
EI-Cd2LS	Cadmium(Cd <sup>2+</sup> )	10 <sup>-1</sup> ~1x10 <sup>-6</sup>	11200~0.1	5~50°C	3~7pH
EI-Ca2LS	Calcium(Ca <sup>2+</sup> )	10 <sup>-1</sup> ~5x10 <sup>-7</sup>	4010~0.02	0~50°C	3.5~11pH
EI-CILS	Chloride(Cl <sup>-</sup> )	1~3x10 <sup>-6</sup>	35000~1	5~50°C	1~12pH
EI-Cu2LS	Cupric(Cu <sup>2+</sup> )	10 <sup>0</sup> ~1x10 <sup>-7</sup>	64000~0.006	5~50°C	2~7pH
EI-CNLS	Cyanide(CN <sup>-</sup> )	10 <sup>-2</sup> ~1x10 <sup>-6</sup>	260~0.03	5~50°C	11~13pH
EI-FLS	Fluoride(F <sup>-</sup> )	10 <sup>-1</sup> ~1x10 <sup>-6</sup>	1900~0.02	5~50°C	4~8pH
EI-ILS	$Iodide(I^{-})$	1~5x10 <sup>-7</sup>	127000~0.06	5~50°C	2~12pH
EI-Pb2LS	Lead(Pb <sup>2+</sup> )	10 <sup>-1</sup> ~1x10 <sup>-6</sup>	20800~0.02	5~50°C	3~7pH
EI-NO3LS	Nitrate(NO <sub>3</sub> <sup>-</sup> )	1~7x10 <sup>-6</sup>	62000~0.4	0~50°C	2~11pH
EI-ClO4LS	Perchlorate(ClO <sub>4</sub> -)	1~2x10 <sup>-6</sup>	99500~0.2	0~50°C	0~11pH
EI-KLS	Potassium(K <sup>+</sup> )	1~10 <sup>-6</sup>	39000~0.04	0~50°C	1~9pH
EI-AgLS	Silver(Ag+)	10 <sup>0</sup> ~1x10 <sup>-7</sup>	107900~0.01	5~50°C	1~9pH
EI-NaLS	Sodium(Na <sup>+</sup> )	3~10 <sup>-7</sup>	69000~0.002	0~50°C	1~9pH
EI-S2LS	Sulphide(S <sup>2-</sup> )	1~1x10 <sup>-7</sup>	3200~0.003	5~50°C	13~14pH
EI-SCNLS	Thiocyanate(SCN <sup>-</sup> )	10 <sup>-1</sup> ~2x10 <sup>-6</sup>	5800~1	5~50°C	2~12pH
EI-HLS	Water Hardness	2x10 <sup>-1</sup> ~5x10 <sup>-5</sup>	-	0~50°C	4.5~10pH
EI-NH3LS	Ammonia(NH <sub>3</sub> )	1M~10 <sup>-6</sup> M	0.02	0~50°C	11~13pH





pH / ORP / Conductivity

# Industrial pH/ORP Electrodes

#### CS1733

Type: 2 in 1 pH electrode

Material: PPS

Test Range: 0 ~ 14pH

Temperature Range: 0 ~ 80°C Temperature System: Ag/AgCl Juction: Double PTFE rine Electrolyte: 3 mol KCL+AqCl

Diameter: 3/4"NPT

Cable: 5M



# CS1753

Type: 3 in 1 pH electrode

Material: PPS

Test Range: 0 ~ 14pH

Temperature Range: 0 ~ 80°C Temperature System: PT1000

Reference System: Ag/AgCl Juction: Double PTFE rine Electrolyte: 3 mol KCL+AqCl

Diameter: 3/4"NPT

Cable: 5M



# CS1737

Type: Industrial Antimony electrode pH sensor

Material: PPS

Test Range: 4 ~ 10pH

Temperature Range: 0 ~ 80°C Temperature System: Ag/AgCl Juction: Double PTFE rine

Electrolyte: 3 mol KCL+AgCl

Diameter: 3/4"NPT

Cable: 5M



# CS2733

Type: ORP electrode Material: PPS / Platinum Test Range: ±1000mV Temperature Range: 0 ~ 80°C

Temperature System: Ag/AgCl Juction: Double PTFE rine Electrolyte: 3 mol KCL+AgCl

Diameter: 3/4"NPT Cable: 5M



# **Industrial Conductivity Electrodes**

# CS3500

Type: Conductivity electrode Material: PPS / Graphite Test Range: 0 ~ 50 mS/cm Temperature Range: 0 ~ 80°C Temperature System: PT1000 Cell Constant: K=1.0

Diameter: 3/4"NPT

Cable: 5M



# CS3510

Type: Conductivity electrode

Material: PPS

Test Range: 50 ~ 500 mS/cm Temperature Range: 0 ~ 60°C Temperature System: PT1000

Cell Constant: K=10 Diameter: 1/2"NPT

Cable: 5M



#### CS3522

Type: Conductivity electrode Material: Titanium

Test Range: 0.1 ~ 100 uS/cm Temperature Range: 0 ~ 80°C Temperature System: PT1000

Cell Constant: K=0.1 Diameter: 1/2"NPT

Cable: 5M



#### CS3523

Type: Conductivity electrode Material: Titanium Test Range: 0.055 ~ 50 uS/cm

Temperature Range: 0 ~ 80°C Temperature System: PT1000

Cell Constant: K=0.01 Diameter: 1/2"NPT

Cable: 5M



# **Industrial Electrodes / Accessories**

DO / Free Chlorine / Ozone



# Industrial DO Electrodes

#### CS4021I

Type: Galvanic DO electrode Material: PPS / Titanium Test Range: 0 ~ 40 mg/L Temperature System: NTC22K Temperature Range: 0 ~ 60°C Cable: 5M/DIN



### CS4021-3H1L

Type: Replacement Membrane Kit Membrane Cap: 3 pcs Electrolyte: 1 bottle(30ml)



# CS4551I

Type: Clark DO electrode Material: PPS / Titanium Test Range: 0 ~ 40 mg/L Temperature System: NTC22K Temperature Range: 0 ~ 60°C



# Cable: 5M/DIN

CS4551-3H1L

Type: Replacement Membrane Kit Membrane Cap: 3 pcs Electrolyte: 1 bottle(30ml)



# CS4021-1L/5L

Type: Galvanic DO electrode Capacity: 30ml / 500ml For: CS4021I





# CS4551-1L/5L

Type: Clark DO electrode Capacity: 30ml / 500ml For: CS4551I





# CS4021-3H

Type: Galvanic DO Membrane Kit Quantity: 3 pcs



# CS4551-3H

Type: Galvanic DO Membrane Kit Quantity: 3 pcs



# CA-SP5

Type: Sandpaper Quantity: 5 pcs



#### CA-GP1

Type: DO electrode protective sleeve Material: POM

Size: Ø50x150mm Diameter: 1/2" / 1" NPT



#### **Industrial Free Chlorine Electrodes**

#### CS5520

Type: Three-electrode sensor Material: Stainless steel / Glass Test Range: 0.05 ~ 20.00 mg/L Temperature Range: 0 ~ 50°C Cable: 3M



#### A580

Type: By Pass Trough for FCL Material: Plexiglass Size: 150x40x220mm



#### **Industrial Ozone Electrodes**

#### CS6520

Type: Three-electrode sensor Material: Stainless steel / Glass Test Range: 0.05 ~ 10.00 mg/L Temperature Range: 0 ~ 50°C Cable: 3M



#### A580

Type: By Pass Trough for DOZ Material: Plexiglass Size: 150x40x220mm





# **Industrial Electrodes / Accessories**

DO / Conductivity / Free Chlorine

# **Industrial DO Electrodes**

# **ELD4900**

Type: Industrial Optical Dissolved Oxygen Sensor

Test Range: 0-200% · 0.00~19.99mg/L Temperature Range : -30~130°C

Pressure Range : ≦0.1Mpa / 0~10m depth

Operation Temperature: 0~45°C Material: SUS316 / Titanium

Size: Ø55x342mm Weight: 1.3kg

Cable: 10M (Up to 80M optional) Ingress Protection: IP68 / NEMA6P





#### **Industrial Conductivity Electrodes**

# ECS3900

Type: 4-Electrode Conductivity Sensor

Test Range: 0-200mS/cm Temperature Range: 0~60°C Temperature System: PT1000

Cell Constant : K≒0.7 Pressure Range: 0.7Mpa Diameter: 3/4"NPT Cable: 28mm

Material: PC / Titanium





# **Industrial Free Chlorine Electrodes / Accessories**

# **ECL5900**

Type: Self-Cleaning Free Chlorine Electrodes

FCL Test Range: 0.00~10.00mg/L pH Compensation Range: 6.8~8.6 Temperature Range: 5~60°C Pressure Range: 0~10bar Flow Speed: 40L/hrs Material: Copper / Platinum Flow Cell Material: Plexiglass



- 1 · pH Electrodes(Optional)
- 2 · Flow Control Sensor
- 3 · Free Chlorine Electrodes







pH Electrodes Flow Control Sensor



Free Chlorine Electrodes

# **Industrial Electrodes / Accessories**

Turbidity / SS / MLSS



# Industrial Turbidity / SS / MLSS Electrodes

ETJ7901

ETJ7902

ETJ7903

ESJ8901

**EMJ9901** 

Type: Industrial Turbidity / SS / MLSS Electrodes

Measuring Principle: 90-degree of the optical detection principle.

Electrodes Material: SUS316L

Lenses Material: Hard-to-scratch sapphire glass.

Test Range: 0-100NTU / 0-500NTU / 0-3000NTU / 0-1000ppm / 0-50g/L

Accuracy: ±3%(Full scale) Reproducibility: ±2%(Full scale) Operation Temperature: 0~40°C

Size: Ø32x163mm Weight: 930g Cable: 10M

Ingress Protection: IP68

Swing Wper Cleaning System(1~9min adjustable, preset 10 min).

Origin: Japan





ETJ7901 · ETJ7902 · ETJ7903 · ETJ8901

EMJ9901

# **Industrial Turbidity Electrodes**

# ETT7901

Type: Industrial Turbidity Electrodes

Measuring Principle: Infrared optical detection principle.

Electrodes Material: SUS316 / Titanium

Test Range: 5-5000NTU Accuracy: ±5%> of reading Reproducibility: ±2%(Full scale) Operation Temperature: 0~45°C

Size: Ø60x256mm Weight: 1.4kg Cable: 10M

Ingress Protection: IP68 Swing Wper Cleaning System

(1min/5min/15 min/30 min/1hr/4hr/12hr/1day/3day/7day adjustable)



# **Industrial SS / MLSS Electrodes**

#### **EST8901**

#### **EMT9901**

Type: SS / MLSS Electrodes

Measuring Principle: Infrared optical detection principle.

Electrodes Material: SUS316 / Titanium

Test Range: 0-19999mg/L(SS) / 0-120g/L(MLSS)

Accuracy: ±5%> of reading Reproducibility: ±2%(Full scale) Operation Temperature: 0~45°C

Size: Ø60x256mm Weight: 1.4kg Cable: 10M

Ingress Protection: IP68 Swing Wper Cleaning System

(1min/5min/15 min/30 min/1hr/4hr/12hr/1day/3day/7day adjustable)



#### Taiwan office

ADD: 4F.-12, No.40-2, Sec. 1, Minsheng N. Rd.,

Guishan Dist., Taoyuan City 333,

Taiwan (R.O.C.)

TEL: +886-3-355-1616

FAX: +886-3-355-1010

# **Beijing Office**

ADD: Room 910, Block A, Huizhi Building, No.9,

Xueqing Road, Haidian District, Beijing

TEL: +86-10-82736273 FAX: +86-10-82732517

# Shanghai Office

TEL: +86-21-64705886

FAX: +86-21-56980056

# Singapore Office

TEL: +65-9642-8237

# China Service Center

ADD: Sima Village, Changping Town,

Dongguan, Guangdong

TEL: +86-156-25752122

FAX: +86-769-83979773

