# **EKO-TRADING CO., LIMITED**

# EKO

# Controllers

### F109 ball valve controller

### **Structure Features**

- It can be used together with Runxin electronic ball valve from DN20 to DN100.
- The matched ceramic ball valve has the advantage of small flow resistance, good corrosion resistance, good wear resistance and long lifetime.
- · ILCD display.

### **Range of Application**

• Ball valve controller is matched with Runxin two wires electronic ball valve to be filter & softener or mixed bed demineralized water treatment systems.



Model	Old Model	Transformer Input	Transformer Output	Environment Temperature	Application
46030	F109	AC100-240V 50-60Hz	DC24V, 1.5A	550°C	Filter & Softener
46040	F109B	AC 100-240V 50-60H2			Mixed Bed







Softener control system



Mixed bed control system

### **CREATE** controllers

### POP-8300A/B Integrated Free Chlorine/CLO2/pH Online Analyzer



### **APPLICATION**

Widely used for online monitoring HCIO/CIO2 free chlorine in residential & drinking water of food industries. It is designed for constructing swimming pool, Spa online analysis and the sewage and waste water disinfection and drug dosing control. It is better than DPD method under the condition of large range.

#### **FEATURES**

- Wall mounted HCIO/CIO2 free chlorine online analysis system integration.
- Especially suitable for the detection of free HCIO and CIO2.
- With potentiostatic sensors, stable operation and long operational life.
- Embedded free chlorine, chlorine dioxide analysis software of two mathematical models.
- 3.5" LCD color display, bilingual Chinese/English, complete operation guided.
- Constant flow rate control with the patents, make sure the measurement accuracy, do not changed by the pipeline pressure.

- Anti-siphon design, the system automatically in the conservation of the state after the shutdown.
- Double channels isolated 4-20 mA, instrument/transmitter for selection.
- High/low limit setting relay (x2), photoelectric programmable, switching/ pulse/PID regulating state.
- Protective plastic chassis, preset back cover, the independent panel.

	HCIO	CIO2	рН	Temp.
Measurement range	0,12 mg/L 0,120 mg/L	0,12 mg/L	212	099,9 (temp. compensation Pt1000)
Resolution	0,120 Hig/L	0,120 Hig/L	0,120 mg/ E	
Accuracy	90% confidenc	e interval ±10%	0,1 level	0,5 °C
Medium	HCIO measurement: pH=68 (free chlorine); ClO2 measurement: not controlled by pH; Temp.: 040 °C; not contain colloid impurities in water			
Analog Output	Double channels isolated 420 mA. Instrument/Transmitter for selection			
Control Output	Double channels relay (ON/OFF), load capacity: AC 220V/3A One channel photo-electronic relay, load capacity: 50 mA (max) AC/DC 30V Photo-electronic relay setting: switch/pulse/frequency divison mode for selection			
Flow rate	250350 mL/min			
Communication port	RS485, Modbus RTU protocol			
Power supply	AC 90240V ±10%, 50/60 HzAC 90240V ±10%, 50/60 Hz			
Consumption	≤5,5W			
Working environment	Temp. 050 °C, relative humidity ≤85% RH (none condensation)			
Storage environment	Temp. 060 °C, relative humidity ≤85% RH (none condensation)			
Protection level	IP54 (plastic cabinet, integration system)			
Cabinet material	Engineer plastic			
Cabinet dimension	380 mm x 280 mm x 130 mm (H x W x D)			
Installation	Wall mounted (with the preset back cover)			



### POZ-8300 Ozone Online Analyzer



### **FEATURES**

- Wall mounted, integrated online ozone (03) analyzer.
- The 7-inch touch display, more convenient operation and more powerful system function.
- With the function of historical data retrieve and dynamic display of parametric curve.
- With the function of flow rate measurement display and no water alarm.
- Switch the screen style in the main interface according to preference, the function of data dynamic display.
- Constant flow rate is patented, and not subject to the pressure change from pipeline.
- Solidify the flow through sensor sensitive areas and the measurement is more stable.
- Protective sealed case, pre-set installation backplane, convenient onsite installation.

Measurement configuration	Ozone (03) /pH/temperature		
	Ozone	02 mg/L (ppm); 020 mg/L (ppm)	
Measurement	рН	212	
	Temperature	099,9 °C	
	Ozone	10% FS	
Accuracy	рН	0,1 pH	
	Temperature	±0,5 °C	
Communication interface	RS485	MODBUS RTU communication protocol	
	Number of channels	Double channels	
	Technical feature	lsolated reversible, completely adjustable, instrument/transmitter dual mode	
420 mA output	Channel configuration	Programmable point to ozone, Temperature, pH	
	Loop resistance	400Ω max, DC 24V	
	Transmission	±0,1 mA	
	Number of channels	Three channels	
Control output	Contact mode	The first for photo-electric switch, the second and third for relay	
Control output	Load capacity	Load current 50 mA max, AC/DC 30V	
	Control point	Programmable function (ozone, temperature, pH, timing)	
Power supply	Connected to electric supply AC 80260V; 50/60 Hz, compatible with all international market power standards (110V, 220V, 260V, 50/60 Hz)		
Installation	Wall mounted (with the preset back cover)		
Cabinet dimension	570 mm x 380 mm x 130 mm (H x W x D), gross weight: ≤10 kg		



### **DCT-8600A Dissolved Oxygen Online Transmitting Controller**



### **APPLICATION**

Widely Used for online monitoring Dissolved oxygen in industrial boiler inlet water, seafood feeding industries.

### ORDER DIRECTION

### Basic order units:

DCT-8600A Dissolved Oxygen Online Transmitting Controller

D03135-23Z Membrane Covered DO Probe

D01150 Two-wire D0 Transmitter

Sensor and accessories selection:

Flow cell: P33

Mounting bracket: P16-Z

Floating bed: P18

Measurement range	Dissolved Oxygen: 020 mg/L; Temperature: 040 °C		
Measurement range	Dissolved Oxygen. 020 mg/L, Temperature. 040 C		
Resolution	Dissolved Oxygen: 0,01 mg/L, Temperature: 0,1 °C		
Stability	Dissolved Oxygen: 0,1 mg/L; Temperature: 0,2 °C		
Indication error	Zero point: ±0,1 mg/L, Consistency: ±0,50 mg/L; Temperature: ±0,5 °C		
Salinity compensation error	±2%; Temperature compensation range 545 °C (Temp. compensation component: 21,9 KSI)		
Analog output	Double channels 420 mA, instrument/transmitter mode for selection		
Control output	Triple channels photo-electrical semiconductor relay load capacity: AC/DC 30V, 50 mA max		
Communication	RS485, MODBUS RTU		
Power supply	DC 24V ±15%		
Power consumption	≤5,5		
Working environment	Temp. 050 °C; Humidity ≤85% RH (none condensation)		
Storage environment	Temp. 060 °C; Humidity ≤85% RH (none condensation)		
Protection level	IP65 (with back cover)		
Dimension	96 mm x 96 mm x 94 mm (H x W x D)		
Hole size	91 mm x 91 mm (H x W)		
Installation	Panel mounted, fast installation		



### MFC/MCC-1300 General Online single/ multi-channels Controller



### ORDER DIRECTION

Sensor description	Model
Digital inductive conductivity/ concentration sensor	CID-2000
Digital conductivity/TDS/ Temp sensor	CRD-2000
Digital pH/ORP sensor	pHD-2000
Digital optical dissolved oxy- gen sensor	DOD-2000
Digital flow sensor	FCD-2000
Digital high range turbidity/ TSS sensor	TUR/TS S-2000
Digital low range turbidity sensor	TUR-2200

### **APPLICATION**

Widely used for sewage water treatment, environmental water quality monitoring, industrial site control, chemical process and so on.

### **FEATURES**

- Display one parameter (MFC-1300) or 1...4 channels parameter (MCC-1300).
- Master-slave dual serial port, Modbus RTU communication procotol.
- Downward RS548 bus and 4...20 mA receiving port can accept one (MFC-1300) or less than four (MCC-1300) arbitrary measurement transmitter.
- Uplink serial port can connect any PLC, computer, and configuration of WIFI,
   Zigbee, 3G, GPRS wireless remote module.
- Store a variety of measurement unit, can be selected from the screen.
- Two channels transmitting output, each channel support 4...20mA output, metering mode and transmitting model for selection.
- Three channels control output which could make each parameter over limit alarm control and DI relation (one channel mechanical contact, two channels electronic contact).
- · Panel mounted shell with full-sealed, IP65 protection level.

Communication	Master RS485 interface connect with DCS or server Slave RS48 interface connect with kinds of digital sensors/transmitter	
420 mA receiving	Connect with two channels 420mA transmitter	
420 mA output	Output two channels 4-20mA signals	
DI input (dry contact)	Two channels DI input, pull on the potential, photo-electric isolating, receiving level, pressure, temp, leakage signals	
Openhard produced	Mechanical contact SPST One channel, AC 220V @3A max	
Control output	Electronic contact Semiconductor photoelectric switch, two channels, load capacity : 50 mA max, AD/DC 30V	
Power supply	DC 24V ±4V	
Working environment	Temp. 050 °C; Humidity ≤85% RH (none condensation)	
Storage environment	Temp. 060 °C; Humidity ≤85% RH (none condensation)	
Protection level	IP65	
Dimension	144 mm x 144 mm x 142 mm (L x W x D)	
Installation method	Panel mounted	



### DOD-2000 Digital Optical Dissolved Oxygen Online Analysis Sensor



### **APPLICATION**

- · Aquaculture, Water ecological Monitoring, Environmental Monitoring.
- · Chemical deoxygenation, thermal deaeration supervising.
- Testing of aerobic and anaerobic tank in sewage water treatment factory.
- Online Dissolved oxygen monitoring of City Municipal water/Network.

#### **FEATURES**

- Measurement/Communication Integrated Optical Dissolved Oxygen sensor.
- Design the dissolved oxygen meter function inside the sensor directly.
- · RS485 digital physical port (Modbus RTU protocol).
- Directly output the dissolved oxygen/temperature analysis data, without any need for analog-digital conversion.
- Setting K-factor, Address and the baud rate by PC software.
- Nanometer chips, high integrated design and high anti-interference ability.
- Can select general multi-functional controller to finish the local display and control.
- Can connect with computer, configuration system, PLC, wireless City Municipal water modules.
- · Meet the demand of system completing in Internet Age.

### ORDER DIRECTION

### Basic order units:

Digital optical dissolved oxygen online analysis sensor Host calibration & setting software

### Selection Units:

MFC-2300 Multi function Controller

MCC-2300 Multi Channel Controller

Multi-Degrees of Freedom environmental sensor bracket

Automatically timing clean device

Installation accessories purchase separately

Special installation accessories can be customized

WIFI, ZIGBEE, CDMA, 3G, GPRS wireless module

Measuring Medium	Dissolved Oxygen in water solution	
Measurement range	020 mg/L	
Main Material	316L Stainless Steel	
Installation Method	Submersible installation	
Accuracy	$\pm$ 0,1 mg/L (<1 mg/L); $\pm$ 0,2 mg/L (>1 \mg/L)	
Medium Temperature	050 V	
Stand Pressure	max 0,2 MPa (25 °C)	
Wire length	Standard length 10 m (or customize)	
Storage Environment	Temp. 045 °C; Humidity <85%RH (none condensation)	
Reply Time	<90 seconds (20°C water temperature)	
Data communication	RS485 (Modbus RTU protocol)	
Power Supply	DC24V ±15%	



### PHD-2000/ORPD-2000 Digital pH/ORP Sensor



### TECHNICAL CHARACTERISTICS

Model	PHD/ORPD-2000		
	pН	014	
Measurement range	ORP	-2000 mV+2000 mV	
	Temperature	0,099,9 °C	
	рН	±0,05	
Accuracy	ORP	±3 mV	
	Temperature	±0,5 °C	
Liquid Temperature	050 °C		
Install thread	Up/end NPT 3/4"		
Pressure	0,6 Mpa (max)		
Cable length	10 m as standard (10100 m are custo		
Communication	RS485 (Modbus RTU)		
Power supply	DC1232V (Consumption <1 W)		

### **FEATURES**

- PHD/ORPD-2000 sensor can connect with the PLC directly or the instruments for receiving 485 Signals.
- It is a detachable sensor. The chemical unit at the front end are changeable.
- Just need one time cable. Sensor cable can be extended for the use of ordinary two-core line.
- Use of a large area of PTFE-liquid junction, not easy to plug, easy maintenance.
- Pipeline installation of the patent-type flow of equipment, accurate measurement, stability, long life.
- Comply with the spirit of environmental protection, reduce the cost of supplies, cost-effective.

### ORDER DIRECTION

PHD-2000 digital pH probe (RS485 communication)
ORPD-2000 digital ORP probe (RS485 communication)
PHT-2000 digital pH probe (4-20mA signal output)
ORPT-2000 digital ORP probe (4...20mA signal output)



### **CRD-2000 Digital Conductivity Sensor**



### **FEATURES**

- Micro-encapsulation technology embeds the measurement unit in the sensor connector.
- Facing the needs of the Internet + era, to achieve no intermediate links on-line measurement.
- Sensor will complete the measurement conversion inside, and directly output measurement data (no need instrument).
- ModbusRTU communication, there is no conversion distortion.
- Can be connected with the computer, configuration system, wireless module, PLC directly.
- Visualize the host computer to set the software, address, baud rate settings.
- Can be composed with company general Multi-channel, Multi-function controller directly to realize Multi-parameter display and control.
- Unparalleled application convenience and cost-effective; equipped with the host computer calibration and the setting of software.

Model	PHD/ORPD-2000			
Cell No.	CRD-2226-13 CRD-2224-13		CRD-2223-13	CRD-2221-13
Constant	10,00 cm-1	1,000 cm-1	0,100 cm-1	0,010 cm-1
Measurement Range	0,520 mS/cm	1,02000 μS/cm	0,5200 μS/cm	0,0518,25 MΩ*cm
Parameter	Measurement range		Resolution	Accuracy
Conductivity	0,50 µS/cm20,00 mS/cm		0,01 μS/cm	1,5 Level
Resistivity	0,05 MΩ*cm18,25 MΩ*cm		0,01 MΩ*cm	2,0 Level
TDS	0,25 ppm10,00 ppt		0,01 ppm	1,5 Level
Temperature	0100 °C		0,1 °C	±0,5 °C
Temperature Compensation	PT1000			
Communication		Isolated RS485	communication	
Power supply	DC24 V ±4V (Consumption <1,5W)			
Storage Environment	Temp2060 °C; Humidity ≤85% RH (none condensation)			
Working Environment	Temp. 050 °C; Humidity <85%RH (none condensation)			
Installation	Thread installation			



### MPS-1400 Digital Multi-parameter integration sensor



### **FEATURES**

- $\bullet \ \ \text{Integration with pH, ORP, DO, conductivity, Turb/TDS, temperature and depth.}$
- It has RS-485 output, in line with the Modbus protocol. It can be directly connected to industrial computer, PLC.
- Communication equipments in accordance with Modbus RTU format.
- · Address and baud rate can be set freely.
- pH,ORP and DO sensors are equipped with quick transfer connector for easy replace.
- Turbidity sensor is equipped with auto clean device and manual maintenance is no needed.
- Completely sealed and st. st. body in IP68 protection level.
- Easy installation and it can be placed into the water. The mobile and rapid response can be achieved.

Parameter	Measurement range Resolution		Accuracy	
		range	resolution	
Turbidity	0,0014000 NTU	0,00110 NTU	0,001 NTU	0100 NTU less than the reading data 5%
		10100 NTU	0,01 NTU	1001000 NTU ±2.5%FS
		1001000 NTU	0,1 NTU	10004000 NTU ±2.5%
		10004000 NTU	1 NTU	
		range	resolution	
Suspended solid	0,50 g/L	01,0 g	0,0001 g	less than the reading data 5% (depend on
Suspended Solid	0,50 g/L	1,010,0 g	0,001 g	Homogeneity of the city active sludge)
		10,050,0 g	0,01 g	
рН	2,0012,00 0,01		±0,1	
ORP	-2000 mV+2000 mV 1 mV		±5 mV	
DO	020 mg/L (ppm)	0,01 mg/L (ppm)		0,3 mg/L (ppm)
Conductivity	02000 µS/cm 020 mS/cm	0,1 μ	S/cm	1,5% (FS)
Temperature	0,099,9 °C	0,1	°C	±0,5 °C
Depth	040 m	0,1	m	±1%
Communication port	RS485, MODBUS F		RS485, MODBUS R	TU
Power supply	DC 928V			
Working Environment	Temp. 050 °C; Humidity ≤85% RH (none condensation)			none condensation)
Storage Environment	Temp. 060 °C; Humidity <85%RH (none condensation)			none condensation)
Size	102 mm x 465 mm (D x L)			
Installation	Immersion			
Pressure	0,4 Mpa			



### TUR/TSS-2000 Digital High range Turbidity/TSS online analyzer



### APPLICATION

The online Turbidity monitoring for the source water quality of the environment environmental monitor station, for the industrial water treatment Recycling process, for the every water inlet and outlet in the sewage water treatment, and the TSS monitoring for the sludge treatment process. Widely used in the water supply factory, paper mill, coal washery and the like Turbidity online monitoring.

### **FEATURES**

- · Performance characteristics.
- · High range TUR/TSS two in one Turbidity analyzer.
- RS485 Digital communication, Modbus RTU standard protocol.
- Combine arbitrarily with the HMI and the wireless module to the system integration.
- Build-in optical maintenance brush/wiper, cycling/presetting cleaning optical window.

Measurement range	Turbidity: 0,014000 NTU; TSS: 0,00150 g/L	
Light source	850 nm (infrared light)	
	<10 NTU, 0,001 NTU	
Resolution	<100 NTU, 0,01 NTU	
Resolution	<1000 NTU, 0,1 NTU	
	<4000 NTU, 1 NTU	
	Turbidity: 0100 NTU ±3.0% FS	
Accuracy	1001000 NTU ±1.0% FS	
Accuracy	10004000 NTU ±1.0% FS	
	TSS: ±5% of reading	
Repeatability	1%	
Sample flow	<3 m/s	
Cable length	Standard length 10 m (or customize)	
Maintenance	Build-in brush, settable period	
Power supply	DC24 V ±15%	
Installation	Submersible installation	
Communication port	RS485 (Modbus RTU protocol)	
Pressure range	≤6 bar	
Working environment	040 °C	
Weight	1,5 kg	
Consumption	<10 W	



### TUR-2200 Digital Low range Turbidity online analyzer



#### **APPLICATION**

The monitoring of each process site in water supply plant such as entry, filtration, precipitation, product water and water quality monitoring about the water supplied through pipeline network.

Water quality monitoring about industrial engineering water, monitoring about circulating cooling water, swimming pool water, and the water through filtration and membrane of water processing systems.

### **OPERATING PRINCIPLE**

When a beam of parallel light passes through the water, under the irradiation of parallel beam the suspended particles in water samples scatters, and the scattered light which have 90 degrees angle with the incident light is detected by photocell, then by using the positive correlation between the scattered light intensity and the water turbidity, and through analysis of the microprocessor, the corresponding turbidity value could be obtained.

### **FEATURES**

- Innovative defoaming system which passes through labyrinth.
- · Flexible optical system maintenance and cleaning.
- · Measures to stabilize the liquid level stable and flow rate, which are not affected by water sample pressure.
- · Multiple calibration methods recommended, which can be comparable to imported products.
- Measuring range supporting 0...100 NTU turbidity.
- · Complete electromagnetic compatibility design, easy against the industrial interference on site.
- · Adopting wide spectrum of tungsten lamp as light source, which improve the sensitivity for small particles.
- · Built-in defoaming system, which gives superior effect, convenient cleaning and improves the detection accuracy.

Test range	0100 NTU		
Resolution	<10 NTU 0,0001 NTU; >10 NTU 0,001 NTU		
Degree of accuracy	<40 NTU ±2.5% FS; >40 NTU ±5% FS		
Linearity	Better than 1% corresponding Formazin 040 NTU, perform accurate calibration for high turbidity		
Repeatability	Better than the reading value $\pm 1\%$ , taking the maximum value within each measuring range		
Signal average time	0, 6, 30, 60 and 90 sec, Users choose		
Sample flow	200700 mL/minute		
Sample temperature range	050 °C		
Working environment	Temp. 050 °C; Humidity 585% (none condensation)		
Storage Temperature Range	-2060 °C		
Data output	RS485 (Modbus protocol)		
Supply voltage	DC24 V ±4V		
Power consumption	<12 W		
Install environment	In-house		



### pH/ORP-8500A ph/ORP Online Meter



### **APPLICATION**

Widely used for online pH/ORP measurement in chemical process, oil refining, metallurgy, pharmacy, chemical synthesis industrial/sewage water treatment, environment monitoring, agricultural technology, biological fermentation, industrial coating and soon.

### **FEATURES**

- 3-5" 32Qx 240 TFT color screen, Multiparameter display.
- It has pointers, numbers and colors with space-time concept and can display forms.
- Be compatible for six kinds of buffer solution which suitable for international standard.
- Touch key, Chinese/English to select, guided operation.
- RS485, Modbus RTU protocol.
- Double channels/Isolated 4...20 mA, instrument/transmitter mode for selection.
- Three channels photoelectric switch control, arbitary combination for PH/ORP/temperature/timing.
- Switch control, frequency pulse, frequency pulse for option, fit for more.
- EMC design with better ability on antiinterference.
- Calendar function which can set timing and reserved timing.
- With the CE Certification.

	рН	ORP	Temp.
	Range: 0,0014,00	Range: -1999+1999 mV	Range: 0,0100,0 °C
Measurement Parameter	Resolution: 0,01	Resolution: 1 mV	Resolution: 0,1 °C
	Accuracy: ±0,1	Accuracy: ±5 mV (indicator)	Accuracy: ±0,5 °C
Medium		080 °C	
Temperature components		Pt1000 temperature components	
Analog Output	Double channels isolated, transportable 420 mA, instruments/ transmitter mode		
Control Output	Triple channels semiconductor photoelectric switch, load current: AC/DC 30V, 50 mA (max)		
Communication port	RS485 , Modbus RTU protocol		
Power supply	DC 24V		
Consumption	<5,5 W		
Working Environment	Temp. 080 °C; Humidity ≤85% RH (none condensation)		
Storage Environment	Temp2060 °C; Humidity ≤85% RH (none condensation)		
Protection Level	IP65 (with rear cover)		
Dimension	96 mm x 96 mm x 94 mm (H x W x D)		
Hole Size	91 mm x 91 mm (H x W)		
Installation	Panel Mounted , Fast installation		



### pH/ORP-7500 ph/ORP Online Meter



#### **APPLICATION**

Widely used for online monitoring in environmental protection water treatment, water environment monitoring, the monitoring of plating solution, chemical process, the circulating cooling water, aquaculture, and acidity in the modem agricultural industry.

#### **FEATURES**

- Be compatible for six kinds of Buffer solution (10.00, 9.18, 7.00, 6.86, 4.00, 4.01).
- Single/Double resistance difference pre-amplification, compatible with more sensor
- With the isolated outlay temperature sensor for medium voltage balance.
- Emerald back-light, big LCD interface, multi symbols.
- Isolated 4...20 mA output, dual mode Instrument/Transmitter.
- Double relay control (one for high limit, one for the low limit) and the time-delay control to control and adjust the pH/ORP.
- Split type, two composite electrode, do not need to replace the cable.
- Isolated Measurement/Transmitter / Controller; no mutual influence, runs steadily.
- Optimal electromagnetic compatibility design, good anti-jamming performance.
- With the sealed instrument housing, has the very good weathering resistance and salt fog protective.
- · With the CE Certification.

	рН		ORP	Temp.
Measurement Range	0,0014,00		-1999+1999 mV	0,099,9 °C (Temp. compensation: NTC10K)
Resolution	0,01		1 mV	0,1 °C
Accuracy	±0,1		±5 mV (electronic unit)	±0,5 °C
Buffer Solution		10.00	), 9.18, 7.00, 6.86, 4.00, 4.01	
Temp. Compensation	099 °C (with 25 °C as	s standard	) manual/automatic Temp. compe	ensation for selection
Analog Output	Single channe	l Isolated	420 mA, Instrument/Transmitter	for selection
Control Output	Double channels replay o	utput, Loa	d capacity: AC 220V/AC 110V, 2A	(max); DC 24V, 2A (max)
Power supply	pH/ORP-7500 DC 24V		pH/ORP-7510 AC 110V	pH/ORP-7520 AC 110V
Consumption	≤4 W			
Working Environment	Temp.	050 °C; I	Humidity ≤85% RH (none condens	ation)
Storage Environment	Temp2060 °C; Humidity ≤85% RH (none condensation)			sation)
Protection Level	IP65 (with rear cover)			
Dimension	96 mm x 96 mm x 105 mm (H x W x D)			
Hole Size	91 mm x 91 mm (H x W)			
Installation		Pane	l Mounted, Fast installation	



### pH/ORP-5500 ph/ORP Online Meter



### **APPLICATION**

Widely used in scientific experiments and flow detection of various pH solution. It is a panel seal type casing, cost-effective pH & ORP line analytical instruments.

### **FEATURES**

- Be compatible for six kinds of Buffer solution, international standard.
- Sealed, cost-effective pH/ORP online controller.
- Outlay temperature sensor design, Universal pH electrode.
- White back-light, overhead multi symbols, simple to set up, easy to use.
- Isolated 4...20 mA output, dual mode Instrument/Transmitter.
- Double relay control (one for high limit, one for the low limit) and the time-delay control.
- Two composite electrode, do not need to replace the cable.
- Isolated measurement/Transmitter / Controller; no mutual influence.
- Optimal electromagnetic compatibility design, good anti-jamming performance.
- · With the CE certification.

	рН	ORP	Temp.	
Measurement Range	0,0014,00	-2000+2000 mV	0,099,9 °C (Temp. compensation: NTC10K)	
Resolution	0,01	1 mV	0,1 °C	
Accuracy	±0,1	±5 mV (electronic unit)	±0,5 °C	
Buffer Solution		10.00, 9.18, 7.00, 6.86, 4.00, 4.01		
Temp. Compensation	050 °C (with 25 °C as	standard) manual/automatic Temp. com	pensation for selection	
Analog Output	Isolated 420 mA, Instrument/Transmitter for selection			
Power supply	pH/ORP-5500 DC 24V	pH/ORP-5510 AC 110V	pH/ORP-5520 AC 220V	
Control Output	Double relay output (ON/OFF); AC 240V/3A			
Power Consumption	≤3 W			
Working Environment	Temp. 050 °C; Humidity ≤85% RH (none condensation)			
Storage Environment	Temp2060 °C; Humidity ≤85% RH (none condensation)			
Dimension	96 mm x 96 mm x 105 mm (H x W x D)			
Hole Size	91 mm x 91 mm (H x W)			
Protection Level	IP65 (with back cover)			
Installation		Panel Mounted, Fast installation		



### pH/ORP-3500 ph/ORP Online Meter



### **APPLICATION**

Widely used in scientific experiments and flow detection of various pH solution. It is a small, low-cost and high cost-effective on-line analysis instruments.

### **FEATURES**

- One kind of popular and cost-effective online pH/ORP controller.
- Be compatible for six kinds of Buffer solution (10.00, 9.18, 7.00, 6.86, 4.00, 4.01).
- Outlay temperature sensor design, Universal pH electrode.
- White back-light, overhead multi symbols, simple to set up, easy to use.
- Isolated 4...20 mA output, dual mode Instrument/Transmitter.
- Double relay control (one for high limit, one for the low limit) and the time-delay control.
- Optimal electromagnetic compatibility design, good anti-jamming performance.
- Multi power supply, DC/AC power input, no polarity connection.
- Compact Quick installation with the Short cabinet.
- · With the CE certification.

	рН	ORP	Temp.	
Measurement Range	0,0014,00	-2000+2000 mV	0,099,9 °C (Temp. compensation: NTC10K)	
Resolution	0,01	1 mV	0,1 °C	
Accuracy	±0,1	±5 mV (electronic unit)	±0,5 °C	
Buffer Solution		10.00, 9.18, 7.00, 6.86, 4.00, 4.01		
Medium Temp.	050 °C (with 25 °C as	s standard) manual/automatic Temp. comp	ensation for selection	
Analog Output	Isolated one	channel 420 mA, Instrument/Transmitter	for selection	
Control Output		Double relay output (single contact ON/OFF)	)	
Power supply	pH/ORP-3500 DC 24V	pH/ORP-3510 AC 110V	pH/ORP-3520 AC 220V	
Power Consumption	≤3 W			
Working Environment	Temp. 050 °C; Humidity ≤85% RH (none condensation)			
Storage Environment	Temp2060 °C; Humidity ≤85% RH (none condensation)			
Dimension	48 mm x 96 mm x 80 mm (H x W x D)			
Hole Size	44 mm x 92 mm (H x W)			
Installation		Panel Mounted, Fast installation		



### CIT-8800 Inductive Conductivity/Concentration Online Controller

CONTROLLERS



### **FEATURES**

- Conductivity/Concentration/TDS/Temperature integration.
- · RS485 MODBUS-RTU protocol.
- Double channels/isolated 4...20 mA output, Instrument/Transmitter mode for selection.
- 3.5"320x240 TFT color screen, Chinese/ English for optional.
- · Touch keys, humanism operation inter-

#### face, guided menu.

- Support conductivity measurement range 0,5...2000 mS/cm, Auto range.
- Application-oriented can be customized, designed accessory for a variety of use conditions.
- Built-in NaOH, HNO3 concentration curve, other new solution can be calibrate.
- Sensor material for optional, for highly corrosive, health requirements.

#### **APPLICATION**

- Conductivity, TDS, Concentration Online Controller of Strong electrolyte aqueous solution.
- Acid and alkali regeneration process on-line concentration analysis of anionic, cationic exchange resin.
- Conductivity of low viscosity, multi-phase liquid online analysis.
- Chemical process, electroplating, coating, oil, metal processing and other industrial conductivity on-line analysis.
- CIP cleaning, sewage treatment and seawater desalination, circulating cooling water, environmental water quality monitoring.
  - Electromagnetic compatibility, with strong ability of anti-interference.
  - Calendar function which can set timing and reserved timing.
  - Password protection function, strengthen system security.

	Conductivity: 5002000000 µS/cm	
Marana Parana	Concentration: 1. NaOH: 015% or 2550%	
	2. HNO3: 025% or 3682%	
Measurement Range	3. User defined concentration curves	
	TDS: 2501000000 ppm	
	Temp.: 0,0120,0 °C	
Resolution	Conductivity: 0,01 µS/cm; Concentration: 0,01%; TDS: 0,01 ppm; Temp.: 0,1 °C	
	Conductivity: 5001000 μS/cm ±10 μS/cm	
Acquirect	12000 mS/cm ±1,0%	
Accuracy	TDS: 1,5 level	
	Temp.: ±0,5 °C	
Temp. compensation	range: 0,0120,0 °C; element: Pt1000	
Analog Output	Two channels isolated, transportable 420 mA, Instrument/Transmitter for selection	
Control Output	Triple channels semiconductor photoelectric switch, Programmable Switch, pulse and frequency.	
Power supply	AC/DC 30V, 50mA (max)	
Data communication	RS485, Modbus RTU protocol	
Power supply	DC 24V ±15%	
Consumption	<5,5 W	
Working Environment	Temp. 050 °C; Humidity ≤85% RH (none condensation)	
Storage Environment	Temp2060 °C; Humidity ≤85% RH (none condensation)	
Protection Level	IP65 (with rear cover)	
Outline dimension	96 mm x 96 mm x 94 mm (H x W x D)	
Hole dimension	91 mm x 91 mm (H x W)	
Installation	Panel Mounted, Fast installation	



### CCT-8301A Conductivity/Resistivity/TDS/TEMP Online Controller



### **APPLICATION**

Multi-effect distilled water for medical systems, boiler bottom water, condensate, heat exchange systems, industrial thermal mechanical parts cleaning, industrial water recycling and conductivity online analysis at high temperature environments running water quality management and automated control over a wide temperature range.

### **FEATURES**

- Integrates conductivity/resistivity/temperature.
- 3.5" 320x240 TFT color screen, multiple parameter display in same screen.
- With the Conductivity constant 0.01; 0.1; 1.0; 10.0 cm-1
- Automatic range switch, arbitrary setting for measurement unit.
- Double channel, Isolated 4...20 mA, Instrnment/Transmitter for selection.
- Control, transmit, arbitrary combination for conductivity/resistivity/TDS/temperature.

- Triple channels Photo-electrical switch control, Choose to conductivity/resistivity/temperature/time.
- Switching logic can be set, Static logic or pulse logic for optional.
- Calendar function, time setting and making an appointment, provide time tags for recording data.
- Pt1000 temperature compensation, with the professionalization of temperature measurement/temperature control.
- Complete isolated channel for the Power, measurement, transmitter and control.

- RS485 communication port, Standard Modbus RTU protocol.
- Optimal electromagnetic compatibility design, good anti-jamming performance.
- DC24V power supply, conform to the safety standards of high humidity site (Port polarity internal automatic identification).
- Password protection function, strengthen system security, with the CE Certification.

Constant         10,00 cm-1         1,000 cm-1         0,100 cm-1         0,010 cm-1           Conductivity         500100000 μS/cm         1,010000 μS/cm         0,5200 μS/cm         0,0518,25 MΩ*cm           TDS         25050000 ppm         0,55000 ppm         0,25100 ppm         -           Temp.           Conductivity: 0,01 μS/cm, 0,01 mS/cm; Resistivity: 0,01 MΩ*cm; TDS: 0,01 ppm; Temp.: 0,1 °C           Accuracy         Conductivity: 1,5% (FS); Resistivity: 2,0% (FS); TDS: 1,5% (FS); Temp.: 0,5 °C           Temperature compensation         With 25°C as standard under normal medium; With 90°(as standard under high temp medium)           Analog Output         Double channel 420 mA, Instrument/Transmitter for selection           Control Output         Triple channels photo-electronic semiconductor relay swith, Load capacity: AC/DC 30V,50mA (max)           Communication port         RS485 Modbus RTU protocol           Power supply         DC 24V ±15%           Protection Level
TDS 25050000 ppm 0,55000 ppm 0,25100 ppm -  Temp. 0180 °C (Temp.Compensation: Pt1000)  Resolution Conductivity: 0,01 μS/cm, 0,01 mS/cm; Resistivity: 0,01 MΩ*cm; TDS: 0,01 ppm; Temp.: 0,1 °C  Accuracy Conductivity: 1,5% (FS); Resistivity: 2,0% (FS); TDS: 1,5% (FS); Temp.: 0,5 °C  Temperature compensation With 25°C as standard under normal medium; With 90°(as standard under high temp medium)  Analog Output Double channel 420 mA, Instrument/Transmitter for selection  Control Output Triple channels photo-electronic semiconductor relay swith, Load capacity: AC/DC 30V,50mA (max)  Communication port RS485 Modbus RTU protocol  Power supply DC 24V ±15%  Protection Level IP65 (with back cover)
Temp.  O180 °C (Temp.Compensation: Pt1000)  Resolution  Conductivity: 0,01 μS/cm, 0,01 mS/cm; Resistivity: 0,01 MΩ*cm; TDS: 0,01 ppm; Temp.: 0,1 °C  Accuracy  Conductivity: 1,5% (FS); Resistivity: 2,0% (FS); TDS: 1,5% (FS); Temp.: 0,5 °C  Temperature compensation  With 25°C as standard under normal medium; With 90°(as standard under high temp medium)  Analog Output  Double channel 420 mA, Instrument/Transmitter for selection  Control Output  Triple channels photo-electronic semiconductor relay swith, Load capacity: AC/DC 30V,50mA (max)  Communication port  RS485 Modbus RTU protocol  Power supply  DC 24V ±15%  Protection Level  IP65 (with back cover)
ResolutionConductivity: 0,01 μS/cm, 0,01 mS/cm; Resistivity: 0,01 MΩ*cm; TDS: 0,01 ppm; Temp.: 0,1 °CAccuracyConductivity: 1,5% (FS); Resistivity: 2,0% (FS); TDS: 1,5% (FS); Temp.: 0,5 °CTemperature compensationWith 25°C as standard under normal medium; With 90° (as standard under high temp medium)Analog OutputDouble channel 420 mA, Instrument/Transmitter for selectionControl OutputTriple channels photo-electronic semiconductor relay swith, Load capacity: AC/DC 30V,50mA (max)Communication portRS485 Modbus RTU protocolPower supplyDC 24V ±15%Protection LevelIP65 (with back cover)
Accuracy Conductivity: 1,5% (FS); Resistivity: 2,0% (FS); TDS: 1,5% (FS); Temp.: 0,5 °C  Temperature compensation With 25°C as standard under normal medium; With 90°(as standard under high temp medium)  Analog Output Double channel 420 mA, Instrument/Transmitter for selection  Control Output Triple channels photo-electronic semiconductor relay swith, Load capacity: AC/DC 30V,50mA (max)  Communication port RS485 Modbus RTU protocol  Power supply DC 24V ±15%  Protection Level IP65 (with back cover)
Temperature compensation  With 25°C as standard under normal medium; With 90°(as standard under high temp medium)  Analog Output  Double channel 420 mA, Instrument/Transmitter for selection  Control Output  Triple channels photo-electronic semiconductor relay swith, Load capacity: AC/DC 30V,50mA (max)  Communication port  RS485 Modbus RTU protocol  Power supply  DC 24V ±15%  Protection Level  IP65 (with back cover)
Analog Output  Double channel 420 mA, Instrument/Transmitter for selection  Control Output  Triple channels photo-electronic semiconductor relay swith, Load capacity: AC/DC 30V,50mA (max)  Communication port  RS485 Modbus RTU protocol  Power supply  DC 24V ±15%  Protection Level  IP65 (with back cover)
Control Output Triple channels photo-electronic semiconductor relay swith, Load capacity: AC/DC 30V,50mA (max)  Communication port RS485 Modbus RTU protocol  Power supply DC 24V ±15% Protection Level IP65 (with back cover)
Communication port  RS485 Modbus RTU protocol  Power supply  DC 24V ±15%  Protection Level  IP65 (with back cover)
Power supply DC 24V ±15%  Protection Level IP65 (with back cover)
Protection Level IP65 (with back cover)
Working Environment Temp. 050 °C; Humidity ≤85% RH (none condensation)
Storage Environment         Temp2060 °C; Humidity ≤85% RH (none condensation)
Dimension         96 mm x 96 mm x 94 mm (H x W x D)
Hole Size         91 mm x 91 mm (H x W)
Installation Panel Mounted, Fast installation



### **CCT-7300 Conductivity/Resistivity Online Controller**



### **APPLICATION**

Widely used for chemical industry, pharmaceutical, food, beverage, paper making industry, industrial coating, municipal water, Environmental and so on.

### **FEATURES**

- Automatic range, digial Temp. Compensation.
- High measurement range, wide range temperature, integration Conductivity/Resistivity parameter measurement.
- Support electrode constant 0.01; 0.10; 1.00; 10.00.
- Arbitrary selection of Conductivity, resistivity and TDS.
- Power supply, measuring, communication, control are completely isolated.
- Isolated, transportable 4...20 mA current loop, Instrument/Transmitter mode for selection.
- Double relay control, ON/OFF contact, high/low limit control.
- Electromagnetic compatibility, with strong ability of anti-interference.
- · With the CE Certification.

Constant	10,00 cm-1	1,000 cm-1	0,100 cm-1	0,010 cm-1
Conductivity	0,540000 μS/cm	1,04000 µS/cm	0,5200 μS/cm	0,0518,25 MΩ*cm0,0518,25 MΩ*cm
TDS	25020000 ppm	0,52000 ppm	0,25100 ppm	-
Temp.		0180 °C (Temp.Cor	mpensation: Pt1000)	
Temperature compensation	With 25°C as stan	dard under normal medium; \	With 90°(as standard under hi	igh temp medium)
Temperature compensation	Pt1000			
Cable length	30 m (max)			
Analog Output	Isolated, transportable 420 mA, Instrument/Transmitter for selection			
Control Output		Double relays, ON/OFF; Load	capacity: AC 230V/2A (Max)	
Power supply	CCT-7300	CCT-7310	CCT-7320	
	DC 24V AC 110V AC 220V			
Working Environment	Temp. 050 °C; Humidity ≤80% RH			
Protection Level	IP65 (with back cover)			
Dimension	96 mm x 96 mm x 105 mm (H x W x D)			
Hole Size	91 mm x 91 mm (H x W)			
Installation		Panel Mounted,	Fast installation	



### CCT-5300E series Conductivity/Resistivity/TDS Online Controller



### **APPLICATION**

High Cost-Effective, widely used for chemical indust1y, paper making industry, industrial coating, pharmaceutical, food, beverage, municipal water, environmental and so on.

### **FEATURES**

- Integrated of Conductivity/Resistivity parameter measurement, support cell constant 0.01cm-1, 0.1 cm-1, 1.0 cm-1, 10.0 cm-1.
- Automatic range switch, Intelligent core.
- White Background LCD display, various of symbols to lead operation.
- Arbitrary selection of Conductivity, resistivity and TDS.
- Check the conductivity, temperature, mA current at any time.
- Isolated, transportable 4...20 mA output, Instrument/Transmitter mode for selection.
- DC 24V; AC 110V; AC 220V power supply for selection.
- Measuring, communication, control are completely isolated, more stable.
- · With the CE Certification.

Constant	10,00 cm-1	1,000 cm-1	0,100 cm-1	0.010 cm-1
Conductivity	0,520000 µS/cm	0,52000 μS/cm	0,5200 μS/cm	0,0518,25 MΩ*cm
TDS	25010000 ppm	0,51000 ppm	0,25100 ppm	-
Medium Temp.		050 °C (Temp. com	pensation: NTC10K)	
Acquirect	Conductivity	Resistivity	TDS	Temp.
Accuracy	1,5% (FS)	2,0% (FS)	1,5% (FS)	0,5 °C
Cable length	≤20 m (max)			
Temperature compensation	050 °C (with 25 °C as standard)			
Transmitting Output	Isolated, transportable 420 mA, Instrument/Transmitter for selection			
Control Output	F	Relay contact: ON/OFF; Load	capacity: AC 230V/5A (Max	r)
Power supply	CCT-5300E	CCT-5310E	CCT-5320E	
rower supply	DC 24V	AC 110V	AC 220V	
Working Environment	Temp. 050 °C; Humidity ≤85% RH (none condensation)			
Storage Environment	Temp2060 °C; Humidity ≤85% RH (none condensation)			
Dimension	96 mm x 96 mm x 105 mm (H x W x D)			
Hole Size	91 mm x 91 mm (H x W)			
Installation		Panel Mounted,	Fast installation	



### **CCT-3300 Series Conductivity Online Controller**



### **APPLICATION**

Widely used for chemical industry, pharmaceutical, food, beverage, industrial coating, municipal water, environmental, etc. conductivity/resistivity online measuring and control. It is a small-scale, industry leading and High Cost-Effective conductivity/resistivity integration online controller.

### **FEATURES**

- Integrated of Conductivity/Resistivity parameter measurement, support cell constant 0.01cm-1, 0.1 cm-1, 1.0 cm-1, 10.0 cm-1.
- Intelligent automatic range, automatic conversion in full range.
- Arbitrary selection of Conductivity, Resistivity and TDS.
- Check the conductivity, temperature, 4...20 mA at any time.
- Single channel Isolated 4...20 mA output, instrument/transmitter mode for selection.
- DC 24V; AC 110V; AC 220V power supply for selection.
- Measuring, communication, control are completely isolated, more stable.
- · With the CE Certification.

Constant	10,00 cm-1	1,000 cm-1	0,100 cm-1	0,010 cm-1
Conductivity	0,520 mS/cm	0,52000 μS/cm	0,5200 μS/cm	0,0518,25 MΩ*cm
TDS	25010000 ppm	0,51000 ppm	0,25100 ppm	-
Medium Temp.		05	i0 °C	
Danaludian	Conductivity	T	DS	Temp.
Resolution	0,01 μS/cm	0,01	ppm	0,1 °C
Accuracy	Conductivity	Resistivity	TDS	Temp.
Accuracy	1,5% (FS)	2,0% (FS)	1,5% (FS)	0,5 °C
Temperature compensation	050 °C (with 25 °C as standard)			
Cable length	≤5 m (max)≤5 m (max)			
mA Output	Isolated 420 mA, Instrument/Transmitter for selection			
Control Output	Relay contact: ON/OFF; Load capacity: AC 230V/5A (Max)			
Working Environment		Temp. 050 °C; Humidity ≤8	35% RH (none condensation)	
Storage Environment	Temp2060 °C; Humidity ≤85% RH (none condensation)			
Power supply CCT-3300 CCT		CCT-3310	CCT-3320	
1 Ower Suppry	DC 24V	AC 110V	AC 220V	
Dimension	48 mm x 96 mm x 80 mm (H x W x D)			
Hole Size	44 mm x 92 mm (H x W)			
Installation	Panel Mounted, Fast installation			



### **ROC-7000 Reverse Osmosis Control Integrated System**



#### **APPLICATION**

Applicable to all kinds of small and medium-sized single-stage, double-stage reverse osmosis control system. With simple operation, complete measurement and configuration, highly integrated system.

### **FEATURES**

- · Human-Computer Interface, 7 inch colour touch screen, dynamic process display.
- · Conductivity test of raw water, primary and secondary conductivity detection, with ultra-limit alarm and discharge drive.
- Human-computer interaction, pop-up soft keyboard, can set or modify the operating parameters, feature-rich, easy to operate.
- Automatic control, with built-in measurement analysis and DI/DO in control system, embedding the process running software, to achieve highly integration.
- Consumables management, consumables pre-processing capacity, the remaining processing capacity forecast makes the user know the operation of the consumables in time.
- Flush mode, the system flush for boot and shutdown, wash time can be free set.
- pH adjustment and Real-time detection of pH, drive ph adjustment pump to balance pH (two-stage) at any time.
- · Set the antiscale metering pump control, and chain with the original pump control.
- Leakage detection, real-time detect the system leakage signal, immediately stop if leakage alarm, to prevent the expansion of the situation.
- Flow detection, record the instantaneous flow of raw water, producing water and concentrated water, to save the cumulative flow.
- Restricted function of concentrated water flow, to avoid illegal operation of membrane components premarure fouling caused by the pursuit of high recovery rate.
- Data storage, operating data recalls in the form of historical curves and data queue, make the user easier to compare and record, and has a U disk export function, and for data backup.
- Remote communication, RS485 communication port can achieve remote transmission through GPRS/WIFI or Zigebee and other wireless modules, but also access to the Internet to achieve remote real-time monitoring and fault diagnosis and other functions.
- Extended redundancy, the manufacturer can extend on basis of this series for user needs.
- Panel installation, detection modules are all built-in, so that the external distribution lines are rare, with simple and beautiful installation
- Good electromagnetic compatibility (EMC) design, calmly deal with complex industrial field electromagnetic environment.





continuation · · · · •

### **ROC-7000 Reverse Osmosis Control Integrated System**

### TECHNICAL CHARACTERISTICS

	Cell constant	0,1 cm-1	1,0 cm-1	10,0 cm-1
	Raw water conductivity		02000 μS/cm	020000 μS/cm
Conductivity .	Primary conductivity	0200 μS/cm	0200 μS/cm	
measurement parameters	Secondary conductivity	0200 μS/cm	02000	μS/cm
·	Temperature compensation	Automatic compensation	on on the basis of 25 °C, compe	ensation range 050 °C
	Accuracy		Matched precision: 1.5 level	
Flow measurement	Instantaneous flow		0999 m³/h	
range	Accumulative flow		09999999 m <sup>3</sup>	
	Measurement range		212	
pH measurement parameters	Accuracy		±0.1 pH	
parameter.	Temperature compensation	Automatic compensation	on on the basis of 25 °C, compe	ensation range 050 °C
DI acquisition	Input signal	Low pressure switch of Tap water, high level of pure water tank, low level of pure water tank, low pressure switch before the pump, high pressure switch after the primary booster pump, high level of secondary pure water tank, low level of secondary pure water tank, high pressure switch after the secondary booster pump.		
	Signal Type	Passive switch contact		
DO Control	Control output	Inlet valve, primary flush valve, primary drain valve, antiscalant pump, raw water primary booster pump, secondary booster pump, secondary flush valve, secondary primary booster pump, secondary flush valve, secondary booster pump		/ flush valve, secondary drain
	Electrical contact	Relay (ON/OFF)		
	Load capacity	3A (AC 250V) - 3A (DC 30V)		
Display screen	Screen color: TFT; resolution: 800x480			
Working power	Working power	DC 24V ±4V		
Working power	Power consumption	≤6,0 W		
Working environment	Temp. 050 °C; Humidity ≤85% RH (none condensation)			
Storage environment	Temp2060 °C; Humidity ≤85% RH (none condensation)			
Installation	Panel mounted	ed Hole (Length x Width 192 mm x 137 mm)		

### OPERATING PRINCIPLE

ROC-7100 Singe Stage Reverse Osmosis Control Integrated System ROC-7200 Double Stage Reverse Osmosis Control Integrated System

Condu	ctivity probe	pH probe	Flow probe	Water leakage sensor
3pie	ces (max)	1 piece (max)	3pieces (max)	1 piece (max)



### **ROC-8221 Single Stage Double Channels RO Controller**



### **APPLICATION**

Single stage double channels integration RO controller used for conductivity monitoring and process program control.

### ORDER DIRECTION

Basic order unit: ROC-8221 single stage RO controller Conductivity cell selection:

Conductivity Cell Constant	Part No.	Remark
0.1 cm-1	CON3133-13	According to
1.0 cm-1	CON1134-13	customer needs
1.0 cm-1	CON3134-14	choose two pieces
10.0 cm-1	CON2136-13	conductivity probe.

### TECHNICAL CHARACTERISTICS

	Dry contact input		Raw water tank level: double channels		Low level
Signal detection (seven channels)					High level
			Pure water tank level: double channels		Low level
					High level
chamicioj			Low pressure protection		
			High pressure protection		
			Pretreatment backwash signal		
			Raw water pump		
			Inlet valve		SPST-NO
Control port (five channels)	Dry contact output		High pressure pump		Load capacity: AC 220V/3A Max;
, , ,	·		Flush	valve	AC 110V/5A Max;
			Conductivity ove val		DC 24V/3A Max
Measure detection points	Raw water conductivity, product water conductivity, raw water Temp.				
			nt 10.0 cm-1 0200		)00 μs/cm
	Raw water conductivity	Cell consta	nt 1.0 cm-1	020	00 μs/cm
	Product water conductivity		nt 1.0 cm-1	020	00 μs/cm
			nt 0.1 cm-1	020	)0 μs/cm
Medium Temp.	050 °C				
Accuracy	1,5 % (FS)				
Communication	RS485 communication (Modbus protocol)				
Working environment	Temp. 050 °C; Humidity ≤85% RH (none condensation)				
Storage environment	Temp2060 °C; Humidity ≤85% RH (none condensation)				
Power supply	DC 24V ±4V				
Protection level	IP65 (with back cover)				
Dimension	130 mm x 180 mm x 60 mm (H x W x D)				
Hole size	122 mm x 172 mm (H x W)				
Installation	Panel mounted, fast installation				

### **OPERATING PRINCIPLE**

Basic order unit: ROC-8221 single stage RO controller		
Conductivity cell selection:		
Conductivity Cell Constant	Part No.	Remark
0.1 cm-1	CON3133-13	According to customer needs choose two pieces conductivity probe.
1.0 cm-1	CON1134-13	
1.0 cm-1	CON3134-14	
10.0 cm-1	CON2136-13	



### **ROC-2315 Single Stage Channel RO Controller**



### **APPLICATION**

Single stage RO controller used for conductivity monitoring and process program control.

### ORDER DIRECTION

### Basic order unit: ROC-2315 Single Stage RO Controller

Conductivity cell selection:

Conductivity Cell Constant	Part No.	Remark	
0.1 cm-1	CON3133-13	Note: CON1134-13	
1.0 cm-1	CON1134-13 (standard)	can't be used for food, beverage,	
10.0 cm-1	CON2136-13	medical or sanitary industries.	

Signal detection (six channels)		Raw water no w	Raw water no water protection	
		Low pressure	Low pressure protection	
	Dry contact input	High pressur	High pressure protection	
		Pure water ta	Pure water tank high level	
		External control mode signal		
		Runnin	g reset	
	Dry contact output	Raw water pump		
		Inlet valve	Load capacity: AC 220V/3A Max; AC 110V/5A MaxSPST-NO Load capacity:SPST-NO AC 220V/3A Max; AC 110V/5A Max	
Control port (five channels)		High pressure pump		
Control port (five channels)		Flush valve		
		Conductivity over-limit drainage valve		
Measurement detection point	Product water conductivity			
M	Product water conductivity: 0,1200 μS/cm, 12000 μS/cm or 10999 μS/cm (with diff		999 µS/cm (with different sensor)	
Measurement range	Product water Temp.: 050 °C			
Working environment	Temp. 050 °C; Humidity ≤85% RH (none condensation)			
Storage environment	Temp2060 °C; Humidity ≤85% RH (none condensation)			
Power supply	AC 220V(±10 %) 50/60Hz			
Dimension	96 mm x 96 mm x 130 mm (H x W x D)			
Hole size	91 mm x 91 mm (H x W)			
Installation	Panel mounted, fast installation			



### **UFC-8021 Ultrafiltration Controller**



### **FEATURES**

- Visuable flow process which can monitor the status of the original water pump, the status of the original water tank, the raw water pressure, the water pump, the water tank, the water pressure and so on.
- Display two flows (raw water and water production) simultaneously. Raw water flow range 0...999 m3/s, the cumulative flow can be manually cleared.

- Intelligent microprocessor chip for data processing.
- With 485 isolated digital interface, standard Modbus communication protocol (RTU).

### TECHNICAL CHARACTERISTICS

Flow measure range	Raw water: 0999 m3/s	
	Produced water: 0999 m³/s	
Accumulated flow	09999999 m³	
Accuracy	1.5 level	
Display method	Backlit LCD 128 x 64 dot matrix; Chinese or English display settings menu and status prompts	
Relay contact load capacity	3A/250V AC (Solenoid valve must be extended through the middle relay drive capability)	
Power consumption	≤3 W	
Supply voltage	DC24V ±4V	
Use of environmental conditions	Temperature: 0 50 °C; Humidity: 85% RH	
	96 x 96 x 80 mm (High x Width x Depth without back cover)	
Appearance size	96 x 96x 105 mm (High x Width x Depth with back cover)	
Install the hole size	91 x 91 mm (High x Width)	

### ORDER DIRECTION

Name	Model	Number
Panel Meter	UFC-8021	1 pc
Flow Probe	FL-1400-13	Select 2 pcs at most
	FL-1500-13	
Leak Sensor	WLS-100	Select 1 pc at most



### **UFC-7000 Ultrafiltration Control Integration System**



### **APPLICATION**

Suitable for all kinds of small and medium-sized single-group, two-group ultrafiltration automatic application control integration system. Simple operation, complete measuring instruments, and high degree of system centralization.

### **FEATURES**

- Human-machine interface, 7-inch color touch screen, dynamic flow display.
- $\bullet\,$  Automatic control, built-in analysis instruments and DI/DO in the control system, embedded process running software, high integration.
- Water leakage detection, real-time detection of system water leakage signal, leakage alarm immediately stop, prevent the expansion of the situation.
- Flow detection, record the instantaneous flow of raw water, water production, backwash, save the cumulative flow.
- Data storage and U disk export function for data backup.

### TECHNICAL CHARACTERISTICS

Flow massurament range	Instantaneous flow	0999 m3/h
Flow measurement range	Cumulative flow	09999999 m³
		Raw water low pressure
		Raw water pump outlet pressure is high
	Input signal	Backwash pump outlet pressure is high
		Preprocess signal
DI		UF1 differential pressure signal
		UF2 differential pressure signal; (double-stage)
		Water tank high level
		Water tank low level
	Input signal	Passive normally open contact
		Raw water pump
		Backwash pump
	Control output	UF1 inlet valve
		UF1 produced valve
		Output signal common ground
		UF1 backwash valve
DO		UF1 flush valve
DO		UF2 inlet valve/disinfection pump; double stage/single stage
		UF2 produced valve; double stage
		UF2 backwash valve; double stage
		UF2 flush valve; double stage
	Control output	Normally open relay (ON/OFF)
	Load capacity	3A (AC 250V) 3A (DC 30V)
Power supply	Supply voltage	DC 24V ±4V (Power consumption 6,0 W)
Install method	Panel type	Open hole (Length x Width, 192 mm x 137 mm)

### ORDER DIRECTION

Name	Model	Model
UFC-7000 Controller	UFC-7000	UFC-7000

