

Electrodes and Accessories

MCS1407 quadrupole conductivity electrode

Feature

- ◆ In the solution of higher concentration, the electrode is not easy to be polarized, and the stability of the data is stable. Good reproducibility
- ◆ Easy maintenance, the four electrodes on a flat surface is easy to clean
- ◆ In low conductivity samples equally well

Specification

- ◆ constant: 0.7
- ◆ Test Range: 0...200ms/cm
- ◆ Pressure range: 0. 7MPa
- ◆ Dimensions: the upper and lower teeth 3/4 NPT pipe
- ◆ Electrode body length: 153mm
- ◆ Plus electrode protection tube length: 166mm



Molded electrode flow cell

Feature

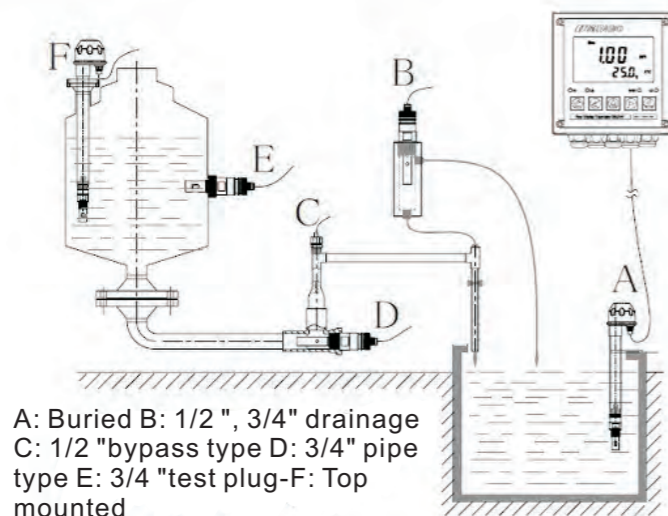
- ◆ Electrode is easy to install and maintain
- ◆ Easy to observe the water sample flow conditions

Specification

- ◆ Size: 130 * Φ40mm
- ◆ Quick connector
- ◆ Material: plexiglass



Online electrical conductivity / resistivity measurement system of FIG



DO-9110 Fluorescence of Dissolved Oxygen Transmitter

Application area

- ◆ Water & waste water treatment
- ◆ Aquaculture monitoring
- ◆ Drinking & surface water measurement
- ◆ Chemical process
- ◆ Recycle & cleaner

Features

- ◆ Transmitter is matched by Fluorescence D.O Electrode.
- ◆ Waterproof & dustproof proof design, to fit wall/ panel / pipe installation.
- ◆ Automatic sensor clean function with programable time interval and hysteresis.
- ◆ Large LCD display, it can show the operation status and symbols.
- ◆ With backlight sensor, automatic and manual backlight setting function
- ◆ Automatic calibration; manual/auto. temperature compensation.
- ◆ With password and multi-key design, security protection enhancement.
- ◆ Equipped RS-485 MODBUS RTU protocol, it can connect to the digital system directly.(DO-9110RS serial only)
- ◆ Two programmable output(DO-9110 serial only)

Parameters

Range	0...200%;0.00...19.99mg/l;0.00...19.99ppm; -30...130.0°C Depending on the electrode
Resolution	0.01%;0.01mg/l;0.01ppm;0.1°C
Accuracy	The reading ±3%;±0.2°C With manual (±1Digit) correction function
Pressure compensation	0.500...2.500bar or 7.25...36.25psi Manual adjustment
Temperature compensation	Automatic
Hi/Lo Relay Output	Two sets Hi/Lo programmable,N/OFF, 240VAC/ 0.5A Max
Analog Output	2 sets of programmable & isolate current DC 0/4~20mA with programable according to DO,Temp. Max. load 500Ω.

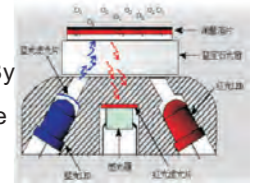


Specifications

AC supply	100V...240VAC±10%,50/60Hz
Temp	0...50°C
Dimensions	144mm×144mm×115mm(H×W×D)
Protection	Correspond to IP65(NEMA4)
Installation	Wall/ panel/ pipe mounting
Cut off Dimensions	138mm×138mm (H×W)
Weight	0.8Kg

Principle

Luminescent dissolved oxygen measuring instrument based on the principle of fluorescence quenching. Blue light illuminate to fluorescent substance shine red light. Due to oxygen molecules take energy, the time and intensity of shining red light and concentration of oxygen are inverse ratio. By measuring phase difference of red light and reference light to calculate the concentration of oxygen



Ordering Guide

Transmitter

- ◆ DO-9110
- ◆ DO-9110D(20-40VDC)
- ◆ DO-9110RS RS-485
- ◆ DO-9110DRS(20-40VDC) RS-485

Standard

- ◆ MD1900 optical dissolved oxygen electrode
- ◆ Bracket

DO-9100 Dissolved Oxygen Transmitter



Parameters

Range	0...200%;0.00...19.99mg/l; 0.000...19.999ppm; -30...130.0°C Depending on the electrode
Resolution	0.01%;0.01mg/l;0.01ppm;0.1°C
Accuracy	The reading±0.5%;±0.5%; ±0.5%; (±1Digit) ±0.2°C With manual correction function
Pressure compensation	0.500...2.500bar or 7.25...36.25psi Manual adjustment
Temperature compensation	Automatic recognition with Pt1000/NTC30K or manual
Salinity compensation	0.0...45.0ppt
Hi/Lo Relay Output	2 sets Hi/Lo programmable,N/OFF, 240VAC/ 0.5A Max
Analog Output	1 or 2 sets of programmable & isolate current DC 0/4-20mA with programable according to DO、Temp. Max. load 500Ω.
Wash Relay Output	ON: 0...9999sec. / OFF: 0...999.9hours

Ordering Guide

Transmitter

- ◆ DO-9100
- ◆ DO-9100D(20-40VDC)
- ◆ DO-9100RS RS-485
- ◆ DO-9100DRS(20-40VDC) RS-485

Application area

- ◆ Ferment process ◆ Recycle & cleaner
- ◆ Drinking & surface water measurement
- ◆ Water & waste water treatment
- ◆ Aquaculture monitoring
- ◆ Chemical process

Features

- ◆ 144X144 microprocessor dissolved oxygen transmitter.
- ◆ Waterproof & dustproof proof design, to fit wall/ panel/ pipe installation.
- ◆ Automatic sensor clean function with programable time interval and hysteresis.
- ◆ Large LCD display, with operating status and special symbols display
- ◆ With backlight sensor, automatic and manual backlight setting function
- ◆ Automatic calibration; manual/auto. temperature compensation.
- ◆ With password and multi-key design, security protection enhancement.
- ◆ Equipped RS-485 MODBUS RTU protocol, it can connect to the digital system directly.(DO-9100RS serial only)
- ◆ Two programmable output(DO-9100 serial only)

Specifications

AC supply	100V-240VAC±10%,50/60Hz
DC supply	20-40VDC
Temp	0...50°C
Dimensions	144mm×144mm×115mm(H×W×D)
Protection	Correspond to IP65(NEMA4)
Installation	Wall/ panel/ pipe mounting
Cut off Dimensions	138mm×138mm (H×W)
Weight	0.8Kg

Standard

- ◆ MD1912 double membrane oxygen electrode
- ◆ Bracket

DO-9300 Dissolved Oxygen Transmitter



Parameters

Range	0...200%;0.00...19.99mg/l; 0.000...19.999ppm; -30...130.0°C Depending on the electrode
Resolution	0.01%;0.01mg/l;0.01ppm;0.1°C
Accuracy	The reading±0.5%;±0.5%; ±0.5%; (±1Digit) ±0.2°CWith manual correction function
Pressure compensation	0.500...2.500bar or 7.25...36.25psi Manual adjustment
Temperature compensation	Automatic recognition with Pt1000/NTC30K or manual
Salinity compensation	0.0...45.0ppt
Hi/Lo Relay Output	2 sets Hi/Lo programmable,N/OFF, 240VAC/ 0.5A Max
Analog Output	2 sets of programmable & isolate current DC 0/4...20mA with programable according to DO、Temp. Max. load 500Ω.
Wash Relay Output	ON: 0...9999sec. / OFF: 0...999.9hours

Ordering Guide

Transmitter

- ◆ DO-9300 ◆ DO-9300D(20...40VDC)
- ◆ DO-9300DRS(20...40VDC) RS-485
- ◆ DO-9300RS RS-485

Standard

- ◆ MD1912 double membrane oxygen electrode
- ◆ Bracket

Application

Widely used in wastewater treatment, aeration monitoring, river sections and lakes coast areas and aquaculture water quality monitoring, in large sewage treatment plants, industrial processes monitoring control and other applications

Features

- ◆ 96X96 microprocessor dissolved oxygen transmitter.
- ◆ Waterproof & dustproof proof design, to fit wall/ panel/ pipe installation.
- ◆ Automatic sensor clean function with programable time interval and hysteresis.
- ◆ Large graphic LCM display, with operating status and special symbols display
- ◆ With backlight sensor, automatic and manual backlight setting function
- ◆ Automatic calibration; manual/auto. temperature compensation.
- ◆ With password and multi-key design, security protection enhancement.
- ◆ Provides digital filter function, can filter out interference value, to make the reading more stable.
- ◆ Equipped RS-485 MODBUS RTU protocol, it can connect to the digital system directly.(DO-9300RS serial only)
- ◆ Two programmable output(DO-9300 serial only)

Specifications

AC supply	100V...240VAC±10%,50/60Hz
DC supply	20...40VDC
Temp	0...50°C
Dimensions	96mm×96mm×148mm(H×W×D)
Protection	Correspond to IP65(NEMA4)
Installation	Wall/ panel/ pipe mounting
Cut off Dimensions	91mm×91mm (H×W)
Weight	0.4Kg

DO electrodes and accessories

MD 1912 DO double membrane electrode

Feature

- No maintenance disposable dissolved oxygen electrode, easy to use
- Silicone, Teflon reinforced two oxygen permeable membrane, durable, Fast response, Water flow effect is small

Specification

- Test Range: 0...20.00ppm
- Response time: 98%<60s(25℃)
- Residual current<0.5% of air current
- Temperature Sensor: NTC22K
- Polarization voltage: -670±50mV
- Air currents: 40...80nA(25℃)
- Operating temperature: 0~50℃
- Pressure: 0...0.4MPa



MD1900 Optical dissolved oxygen electrode

Feature

- fluorescence principle, needn't to replace the membrane and electrolyte
- Do not consume oxygen, no flow rate and agitation requirements, high accuracy
- Automatic detection feature ensures that the measured value
- No flow requirements, can be measured in still water

Specification

- Range: 0...20mg/l(0...20ppm)0...200%SAT
- Repeatability: +/-0.5%FS
- T90: 60S
- Material: Noumenon: SUS316L stainless steel titanium, Phosphor layer cap: POM, fluorescent layer: Silicon
- Screw connection: G1
- Cable: 80m



CLN03 MD1900 Electrode cleaning device

Feature

- Installation and maintenance easy

Specification

- Installation: by screws
- Size: 120 * Φ65mm



Bracket

PP-100B



PP-100A

TURB-1100 turbidity /suspended solid
/sludge concentration (MLSS) Transmitter

Application area

- Chemical process
- Recycle & cleaner
- Drinking & surface water measurement
- Water & waste water treatment

Features

- 144X144 microprocessor turbidity/suspended solid, MLSS transmitter.
- Waterproof & dustproof proof design, to fit wall/ panel/ pipe installation.
- Automatic sensor clean function with programmable time interval and hysteresis.
- Large LCD display, it can show the operation status and symbols.
- With backlight sensor, automatic and manual backlight setting function.
- 5 points auto. Calibration; single point calibration can be according to lab. or field analysis and adjustable.
- With password and multi-key design/security protection enhancement.
- Stainless steel electrode housing design with scratch resistant lenses.
- Without color, bubbles interfere with built-in automatic cleaning system.
- 90 degree angle optical monitoring principles designed to meet the US EPA and ISO7027.
- Equipped RS-485 MODBUS RTU protocol, it can connect to the digital system directly. (Turb-1100RS serial only)
- Two programmable output (Turb-1100 serial only)

Ordering Guide

Transmitter

- TURB-1100
- TURB-1100D(20-40VDC)
- TURB-1100RS RS-485
- TURB-1100DRS(20-40VDC) RS-485

Standard

- TC-100/500/3000 Japan OPTEX turbidity sensor
- TCS-1000 Japan OPTEX suspended solids sensor
- TCMS-50 Japan OPTEX sludge concentration sensor
- Bracket



Parameters

Turbidity	NTU, FTU, FNU
Suspended solids	ppm, mg/l
MLSS	g/l
range	Depending on the electrode
Resolution	AUTO(0.01, 0.1, 1)
Hi/Lo Relay Output	2 sets Hi/Lo programmable, N/OFF, 240VAC/ 0.5A Max
Analog Output	1 or 2 sets of programmable & isolate current DC 0/4-20mA with programmable according to Turb./SS/MLSS.
Wash Relay Output	ON: 0...9999sec. / OFF: 0...999.9hours

Specifications

AC supply	100V-240VAC±10%, 50/60Hz
DC supply	20-40VDC
Temp	0...50℃
Dimensions	144mm×144mm×115mm(H×W×D)
Protection	Correspond to IP65(NEMA 4)
Installation	Wall/panel/pipe mounting
Cut off Dimensions	138mm×138mm (H×W)
Weight	0.8Kg