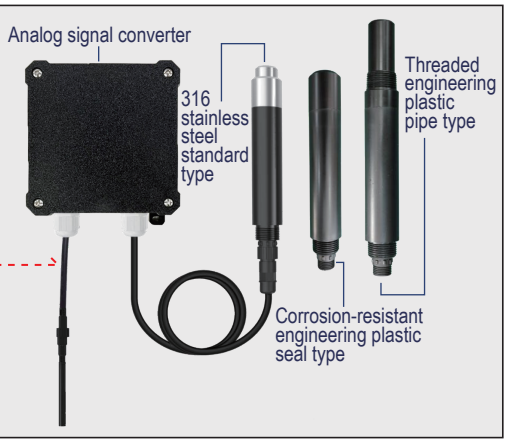
DCbox DISSOLVED OXYGEN TRANSMITTER DCRS-LDO

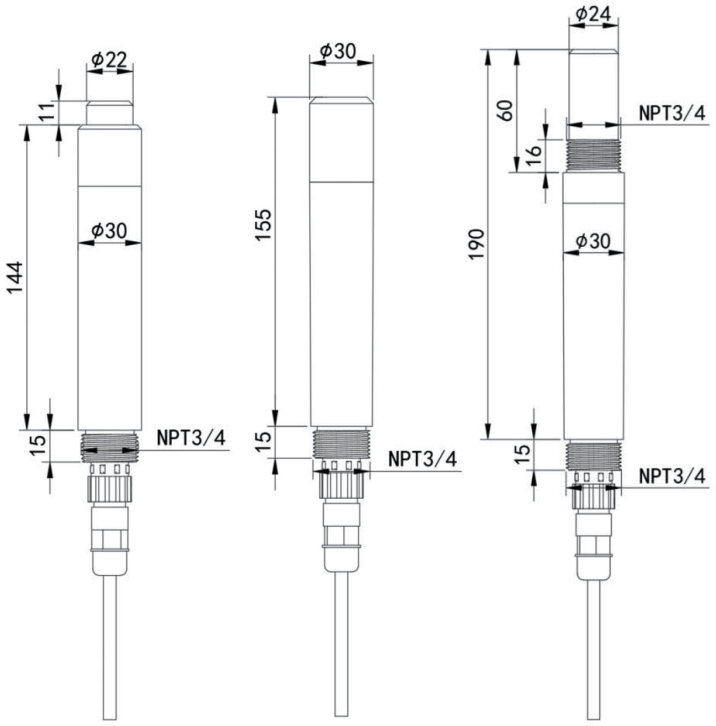
- Capable of measuring dissolved oxygen concentration in solutions, equipped with a built-in temperature sensor and automatic temperature compensation function.
- Widely applicable in industries such as wastewater treatment, aquaculture, and environmental monitoring.
- RS485 communication interface: ModBus-RTU communication protocol.
- ModBus communication address is configurable, and baud rate is adjustable, facilitating connection to computers for monitoring and communication.
- Dissolved oxygen measurement range: 0–20 mg/L (0–200% saturation).
- Analog output options: 4–20 mA; 0–5 V; 0–10 V selectable.
- Device supports wide voltage power supply: DC 10–30 V (DC 24 V required for 0–10 V output).
- Uses a high-quality imported fluorescent membrane with a lifespan of one year; membrane is replaceable.
- Based on fluorescence measurement principle: does not consume oxygen and requires no electrolyte.

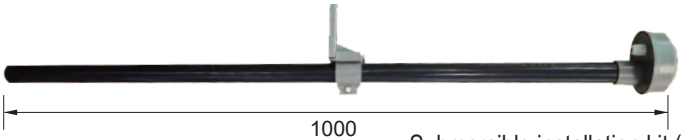


SPECIFICATIONS

- ◆Power supply : DC 10~30V (0~10V power supply DC 24V)
- ◆Power consumption : 0.2W (communication) / 0.8W (analog)
- ◆Communication interface : RS485; standard ModBus-RTU protocol; Communication baud rate is preset to 4800 (2400, 4800, 9600, 19200, 38400, 57600, 115200 can be set) Analog signal: 4~20mA, 0~5V, 0~10V
- ◆Measurement principle : Fluorescence method
- ◆Measurement range : 0~20mg/L (0~200% saturation)
- ◆Measurement error : ±3%FS; ±5℃(25℃)
- ◆Resolution : 0.01mg/L; 0.1%; 0.1℃
- ◆Response time : ≦60s
- ◆Equipment working conditions : Probe: 0~40℃ Converter housing: -40℃~60℃, 0%RH~95%RH (non-condensing)
- ◆Fluorescent film life : One year of normal use (replaceable diaphragm)
- ◆Waterproof level : Probe: IP68 Waterproof housing: IP65
- ◆Probe withstand voltage : 0.6MPa
- ◆Electrode line length : Standard 5 meters
- ◆Shell material : Stainless steel/engineering plastic

DIMENSIONS (mm)





Submersible installation kit (optional)

ORDER INFORMATION

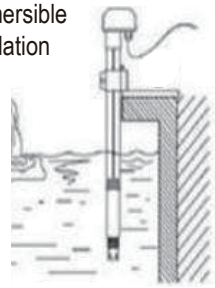
DCRS- Code1 - Code2 - Code3

Code1	Transmitter	Code2	Output Signal
LDO	Fresh water	V	0~10V
LDOS	Sea water	Y	RS-485
		A	4~20mA

Code3	Material
2	316 standard type (fresh water)
3	Sealed corrosion resistant type (sea water)
4	Dental vascular type (fresh water)

INSTALLATION METHOD

Submersible Installation



The sensor cable passes through a stainless steel tube. The top of the sensor head features a 3/4" threaded connection, which should be securely connected to the stainless steel 3/4" thread using PTFE (Teflon) tape. Ensure that the top of the sensor and the cable entry point remain watertight to prevent water ingress.

WIRING CONNECTION

Comm.	Wire Color	Description
Power	Brown	Power+(10-30Vdc)
	Black	Power-
Comm.	Yellow(Green)	485-A
	Blue	485-B

Analog	Wire Color	Description
Power	Brown	Power+(10-30Vdc)
	Black	Power-
Output	Blue	Signal+
	Yellow(Green)	Signal-