



## CAPITAL CONTROLS

The Series 9610 Dissolved Oxygen Indicator and Transmitter is a microprocessor-based instrument designed for the continuous measurement and retransmission of dissolved oxygen levels in water. The microprocessor-based electronics provide unequaled accuracy and reliability combined with user friendly operation. The unit is housed in a NEMA 4X weather-proof enclosure making it suitable for wall or outdoor handrail mounting.

A large easy-to-read 4-digit LED display indicates the dissolved oxygen level in either ppm or percent saturation. The temperature of the process can also be displayed. Dual set point contacts, programmable for either high or low oxygen levels, are a standard feature, as is an auxiliary contact which can be configured as an instrument malfunction contact or as a control contact output. Alarm conditions are indicated on the face of the unit by LEDs.

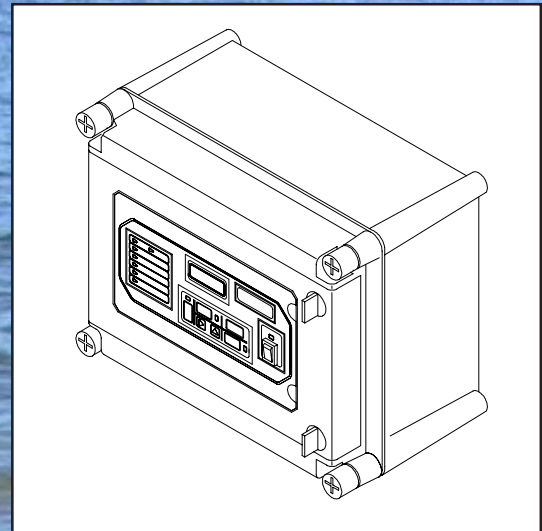
The data logging system stores the highest and lowest dissolved oxygen measured and logs the average value over the previous 24 hours. This information can be recalled at any time. For ease of use, all set up, alarm and control functions are accessible on the front panel. The 4-digit display has digits 1/2" high to ensure readability at a distance.

The galvanic type probe incorporates a replaceable cell with automatic temperature compensation, and is guaranteed for 12 months operation. The 4-1/2 square inch membrane surface provides the probe with ample measure surface to produce a strong, reliable signal.

The plug-in cartridge type probe facilitates on-site replacement in a matter of minutes. By use of a gel-type electrolyte and a fully-supported membrane eliminates a common problem with other probe designs, where electrolyte loss occurs when the membrane tears.

The probe is connected to a signal conditioning module by a 25 foot (8 meter) cable. The signal conditioning module conditions and amplifies the probe signal then retransmits the signal to the instrument. This conditioned signal is highly immune to interference and noise which allows cable distance of up to 1000 feet (305 meters) between the conditioning module and the instrument.

## Dissolved Oxygen Indicator & Transmitter Series 9610



- ◆ Unique data logging
- ◆ Self diagnostics
- ◆ Microprocessor-based
- ◆ Ambient air calibrated
- ◆ NEMA 4X enclosure
- ◆ Wall or handrail mounting
- ◆ Field-proven sensors

## Warranty and Capability

Capital Controls offers a one (1) year limited warranty on all Dissolved Oxygen indicators and transmitters, and probes.

Capital Controls is 9001 certified to provide quality and precision materials, and specializes in disinfection technologies, water quality monitors and instrumentation for water and wastewater. Over 35 years of industrial and municipal application experience in the water and wastewater industries is incorporated into the equipment design to provide the highest quality comprehensive solutions for the global market.

## Technical Data

**Range (User selectable):**  
0-2.5, 0-5.0 ppm, 0-10, 0-20 ppm or 0-200% Saturation

**Accuracy:** ±1.0% of range

**Temperature Compensation:** Solid-state, 0-45° C (32° to 113°F)

**Repeatability:** ±1.0%

**Display:** 4-digit LED

**Analog Output:** Isolated 4-20 mAdc into 1000 Ohms maximum

**Probe:** Automatic temperature compensated with 25 feet (8 m) of cable

**Power Requirements:** 120 or 240 Vac, 50/60 Hz, single phase. 6 watts (0.06 amps)

**Ambient Temperature:** -30° to 65° C (-20° to 150° F)

### Brief Specification

The face of the Dissolved Oxygen unit shall contain the display function switches, status indicators and power switch. The unit shall store the minimum and maximum measured dissolved oxygen levels in either ppm (parts per million) or percent saturation since last reset. It shall also calculate and store the average measured dissolved oxygen level over the previous 24-hours. The information shall be accessible from the front panel of the instrument. The unit shall provide automatic temperature compensation utilizing linear, solid-state technology and provide automatic altitude correction.

The enclosure shall be NEMA 4X (IP66) construction suitable for wall or handrail mounting.

The dissolved oxygen level in either ppm or percent saturation shall be displayed on a 4-digit, high-intensity LED indicator with 1/2" high numerals. The display shall be able to indicate the process temperature.

An isolated 4-20 mAdc output signal proportional to the measured dissolved oxygen shall be provided.

The instrument shall incorporate user-selectable ranges of 0-2.5, 0-5.0, 0-10 and 0-20 ppm or 0-200%.

The dissolved oxygen unit shall be powered by a (120 Vac) (240 Vac) 50/60 Hz., single phase power supply.

The galvanic cell probe shall have a lead anode and a (silver) (gold) cathode. The cathode will be of a cylindrical design that supports a membrane with a surface area of 4 1/2 square inches. The lead anode shall have a minimum surface area of 120 square inches. A solid gel electrolyte is contained between the electrodes.

Design improvements may be made without notice.

Represented by:



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