



## DO5500 Dissolved Oxygen Controller / Transmitter

Designed for fermentation, medicine manufacturing, industrial dissolved oxygen analysis and control applications. With Clark cell mode and Galvanic cell mode selectable, and automatically compensates salinity / barometric pressure after manual input, it is advantageous for all demanding applications.

### Main Features:

- NEMA4X, IP65 rated: waterproof and anti-gas. High protection against electromagnetic interference.
- Large LCD, with high luminance LED orange backlight.
- Automatically compensates salinity / barometric after manual input for increased accuracy.
- Automatically compensates pipeline / depth pressure after manual input for increased accuracy.
- Control modes: on/off limited control(LIT).
- Separately adjustable high and low set-point hysteresis (dead bands) prevent chattering of relays around the set points.
- Two level password protection prevents unauthorized tampering with settings.
- Scalable isolated 0/4 -20 mA Outputs.
- RS-485 output.

### Typical Applications:



Fermentation



Industrial process



Boiler water



Circulating water

### Specifications:

|                                   |   |                         |   |
|-----------------------------------|---|-------------------------|---|
| Range                             | 0.0 to 40.00 ppm ; 0.0 to 400.0 %<br>-5.0 ~ +100 °C               | Signal Output / Load    | 0 / 4 - 20 mA isolated current output, set up by user |
| Resolution                        | 0.01 ppm ; 0.1 % ; 0.1 °C   | Data Interface          | RS-485  |
| Accuracy                          | ±2% F.S.; ±0.5 °C   | Relay Output            | 3 SPST relays, 250V/1A (or 110V/2A)                   |
| Calibration Point                 | 1 point (100% saturation) or<br>2 points (0% and 100% saturation) | Control hysteresis band | 0.01 - 2.00 ppm<br>0.1 - 20.0%                        |
| Temperature Compensation          | Automatic ( ± 10 °C offset adjustment ) / Manual                  | Cleaning Circle         | From 1 to 999 hours                                   |
| Electrode                         | Clark / Galvanic  | Cleaning Time           | From 1 to 999 seconds                                 |
| Temperature Electrode             | NTC22K  | LCD                     | Big-size screen of crystal display, orange back light |
| Salinity Compensation             | 0.0 - 45.2 ppt  | Power                   | 110V / 220V AC  |
| Atmospheric Pressure Compensation | 500 - 768 mmHg  | EMC Specification       | EN 50081-1 / EN 50082-1                               |
| Process Pressure Compensation     | 0.00 - 4.00 Kg  | Working temperature     | - 10 to 50 °C (14 to 122 °F)                          |
| Liquid Level Compensation         | 0.0 - 20.0 m  | Humidity                | 10 to 95% (no frozen dew)                             |
| Control Function                  | Limited Point (On / Off)  | Protection grade        | NEMA 4X, IP 65  |
| Signal Output Load                | 600Ω  | Dimensions              | 190 * 160 * 133 mm                                    |
|                                   |   | Installation            | Wall Mounting   |
|                                   |   | Weight                  | 1.5 Kg  |