

# Orion ionplus® Series Monitors Specifications



## 1816DO Dissolved Oxygen Monitor

### Features:

- Low-level detection - 0.1 ppb
- Galvanic cell with low-level guard ring
- 316 stainless steel flow cell
- Digital LCD readout
- Built in alarms and relays
- Pre-assembled Teflon®† membrane module for easy replacement

### Markets:

- Power
- Pulp and Paper
- Chem / Petrochemical

### Applications:

- Boiler feed water
- Ultra pure water
- Process steam
- Deaerator outlet
- Condensate
- Oxygen feed control for plants using oxygen treatment chemistry

### Environmental Instruments Water Analysis Instruments

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S-1816AO-E 0506 RevB

### Specifications

#### 1816DO

|                          |  |
|--------------------------|--|
| Measuring Range:         | 0.1 ppb-300 ppb dissolved oxygen   |
| Calibration Range:       | 0-10 ppm oxygen in water saturated air   |
| Accuracy:                | 0.1 ppb ± 2%, whichever is greater   |
| Response Time:           | 1 min, from high to low levels   |
| Signal Output:           | 4-20 mA or 0-20 mA 0-5V or 1-5V DC Bi-directional RS232, 2 relay                               |
| Sample Requirements:     | Temperature: 2 to 45°C (35 to 113°F) Flow: 50-200 mL/min<br>pH: > 4 Pressure: < 4 bar (60 psi) |
| Calibration:             | Automatic in water saturated air   |
| Protection Rating:       | NEMA 4X/IP65   |
| Electrical Requirements: | 115/230V AC 50/60 Hz 50 watts  |
| Shipping:                | Dimensions: (LxWxD) 16x26x9 cm (6.3x10.24x3.54 in)<br>Weight: 4.9 kg (10.8 lbs)                |

### Ordering Information

| Cat. No.    | Description  |
|-------------|--|
| *1816DO:    | Low-level dissolved oxygen monitor, complete with flow cell, maintenance kit and electrode with 10 foot shielded cable, 115/230V                 |
| 1816D2:     | Low-level dissolved oxygen monitor, 115/230V (without electrode)   |
| 1816FP:     | Portable fluidics panel, with needle valve and bypass, quick connect fitting, for easy hook up (shown above with monitor and electrode attached) |
| 181621:     | Low-level dissolved oxygen probe, with 10 foot shielded cable  |
| 181621X:    | Low-level dissolved oxygen probe, custom length shielded cable (30 foot max)   |
| 181622:     | Maintenance kit, with membrane module, o-ring, and fill solution   |
| 223115-S01: | Flow cell assembly   |



Dissolved Oxygen Probe  
and Filling Solution

\*Note: 1816DO shown with 1816FP fluidics panel. Requires purchase of 1816FP

Above data generated under optimal/controlled circumstances.

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† Teflon is a registered trademark of DuPont



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