



# ODO RTU

OPTICAL DISSOLVED OXYGEN & TEMPERATURE SENSOR



**An easy way to install YSI ODO™ technology at your site, tank, or pond.**

Engineered specifically for aquaculture applications, but at home in any Modbus system, the optical dissolved oxygen (ODO) sensor can be used to ensure adequate oxygen levels for your livestock or for improved energy efficiency. With YSI's **ODO RTU**, you'll benefit from reduced costs, less maintenance, and better data.

ODO RTU utilizes the most advanced DO technology and can be connected anywhere without the need for special connectors. Additional inputs for barometric pressure and salinity are used to accurately calculate the DO% and mg/L. ODO RTU is also available with built-in conductivity measurement to automatically compensate for salinity.



Connect directly to your PLC or data logger and communicate via Modbus



Highly-accurate ODO sensor technology with no stirring



2-year cable and probe warranty with user-replaceable DO cap



a xylem brand

# ODO RTU OPTICAL DISSOLVED OXYGEN & TEMPERATURE SENSOR

## ODO RTU



ODO/T

ODO/CT

### ODO RTU Specifications (ODO/T probe assembly)

Size	2.46 cm diameter, Cable options for 1, 4, 10, 20, 30, 50, and 100 m lengths	
Dissolved Oxygen (Optical luminescence) Units: % saturation, % saturation local, mg/L, ppm	Range	0 to 500%, 0 to 50 mg/L
	Accuracy	0 to 200%: $\pm 1\%$ of reading or 1% saturation, whichever is greater; 200 to 500%: $\pm 8\%$ of reading; 0 to 20 mg/L: $\pm 0.1$ mg/L or 1% of reading, whichever is greater; 20 to 50 mg/L: $\pm 8\%$ of reading
	Resolution	0.01 mg/L and 0.1 %, or 0.1 mg/L and 1% (auto-adjusted based on range)
Temperature (Thermistor) Units: °C, °F, K	Range	-5 to 70°C (-5 to 50°C; DO compensation range for mg/L)
	Accuracy	$\pm 0.2^\circ\text{C}$
	Resolution	0.1°C or 0.1°F (auto-adjusted based on range)
Communication	Modbus/RS485 (4 wire)	
Default Baud Rate	9600 (user programmable)	
Power Requirements	10 V to 16 V DC, 15 mA max	
Warranty	2 years on cable, probe, and ODO sensor cap	

### Additional Conductivity Specifications (ODO/CT probe assembly)

Conductivity (Four nickel electrode cell) Units: $\mu\text{S}/\text{cm}$ , $\text{mS}/\text{cm}$	Range	0 to 200 $\text{mS}/\text{cm}$
	Accuracy	0 to 100 $\text{mS}/\text{cm}$ $\pm 0.5\%$ of reading or 0.001 $\text{mS}/\text{cm}$ , whichever is greater; 100 to 200 $\text{mS}/\text{cm}$ $\pm 1.0\%$ of reading
	Resolution	0.001, 0.01, or 0.1 $\mu\text{S}$ (range dependent)
Salinity (See YSI.com for additional calculated parameters) Units: $\mu\text{S}/\text{cm}$ , $\text{mS}/\text{cm}$	Range	0 to 70 ppt
	Accuracy	$\pm 1.0\%$ of reading or $\pm 0.1$ ppt, whichever is greater
	Resolution	0.01 ppt

### Part Numbers

627350-x	ODO RTU Probe Assembly cable lengths available in 1, 4, 10, 20, 30, 50, and 100m options
627370-x	ODO RTU Probe Assembly with Conductivity cable lengths available in 1, 4, 10, 20, 30, 50, and 100m options
627180	Replacement ODO Extended Warranty Sensor Cap

YSI, a Xylem brand  
1725 Brannum Lane  
Yellow Springs, OH 45387

+1.937.767.7241  
info@ysi.com  
YSI.com



YSI.com/ODORTU