

Water Quality Meters

Thermo ORION pH, Conductivity, and Dissolved Oxygen Field Meters

The Thermo ORION Field Meters are portable waterproof instruments that can measure pH, conductivity, and dissolved oxygen for field use. A complete line of Thermo Orion electrodes, buffers, solutions and accessories for these meters are available from Geotech.

Thermo ORION 260A and 261S pH/mV/Temperature Meters



- **Waterproof and Intrinsically Safe/Waterproof Versions**
- **2 Point Autocalibration with Choice of Buffers**
- **Designed for Field Use**
- **Optional RS 232 Interface and Software**

The Models 260A and 261S were designed for accurate measurement of pH, mV and temperature in the field. Model 261S is rated as intrinsically safe for measurement in hazardous and confined space environments and anywhere non-sparking equipment is desired. A large easy-to-read display monitors electrode response conditions and calibration status as well as pH, mV and temperature readings. The battery-operated meter is supplied with a built-in quiver and neckstrap. The meter and electrode package contains a rugged, low-maintenance Orion Triode 3-in-1 combination pH Electrode.

Thermo ORION 130A and 131S Waterproof Conductivity/TDS/Salinity/Temperature Meters



- **Model 131S Intrinsically Safe (Explosion Proof)**
- **Compatible with USP Regulations**
- **Wide Cell Constant Range for Maximum Compatibility**
- **Optional RS 232 Interface and Software**

The Models 130A and 131S are designed for measurement of conductivity, salinity, total dissolved solids and temperature. Wide measurement range allows for a variety of samples. The meters calibrate via cell constant adjustment method. The meters are compatible with two or four electrode cells. Temperature compensation options, such as automatic or manual linear function, and nonlinear function for ultrapure or natural water are available. These meters offer an easy to use interface and GLP features such as cell status and self-diagnostic testing. The Model 131S is intrinsically safe for use in a non-sparking environment. Complete field kit available.

Thermo ORION 830A Dissolved Oxygen/Temperature Meter



- **Calibrate by Electrode Zeroing, in Air or Liquid**
- **Automatic Temperature and Barometric Pressure Compensation**
- **Rugged Waterproof to IP66**
- **Optional RS 232 Interface and Software**

Thermo Orion's new Model 830A is a basic waterproof handheld dissolved oxygen meter with built-in probe quiver for air calibration. With dual display of DO and temperature three calibration options and automatic temperature and barometric pressure compensation, Model 830A is the easiest to use meter available. The meter comes with Model 083005A dissolved oxygen probe.

Geotech Environmental Equipment, Inc.

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Thermo ORION pH, Conductivity, and Dissolved Oxygen Field Meters Specifications

Model 260A/261S pH/mV/Temperature Meters

<u>pH</u>		<u>mV</u>	
Range	-200 to 16.00	Range	± 1300 mV
Accuracy	0.01	Accuracy	0.1% value + 0.30
Resolution	0.01	Resolution	0.1
Calibration Points	2	Display	Custom LCD
<u>Temperature</u>		Inputs	WP DIN, 4mm Banana
Range	-20 °C to 120 °C	Outputs	--
Resolution	0.1	Power	3 x alkaline AA batteries
Relative Accuracy	0.3	Agency Approvals	CE, FM, EX Intrinsically Safe
		Environmental Requirements	-10 °C to 55 °C

Model 130A and 131S Waterproof Conductivity/TDS/Salinity/Temperature Meters

<u>Conductivity</u>		Cell Constant	0.001 cm ⁻¹ to 199.9cm ⁻¹
Range	0.0µ/cm to 500 mS/cm 4 electrode cell, cell constant 0.55 cm ¹ 0.0µS/cm to 100.0 µS/cm 2-electrode cell, cell constant 0.1cm ⁻¹	Cell Calibration	Direct entry of cell constant automatic determination of cell constant by KCl solution: 0.01, 0.1, 1M
Accuracy	<1% of meas value+4 counts	Temperature Comp.	NTC 30 Û (automatic detection) or manual, linear TC characteristic 0.00 to 9.99%/ °C or non-linear for natural waters and ultrapure water (NLF)
Resolution	0.01		
<u>Salinity</u>		Datalogger	--
Range	0.0 to 70.0 (10 to 30 °C)	Remote Interface	--
Accuracy	<0.3 °C + 1 count	Waterproof Rating	IP66
<u>Total Dissolved Solids</u>		Agency Approvals	CE, FM & Ex Intrinsically Safe
Range	0 to 1999 mg/L (10 to 120 °C)	Display	Custom LCD
<u>Temperature</u>		Inputs	8 WP Pin DIN
Range	- 20 °C to 120 °C		
Resolution	0.1		
Accuracy	0.3		

Model 830A Dissolved Oxygen/Temperature Meter

<u>Dissolved Oxygen</u>		Auto Barometric	
Range, mg/L (ppm)	0.00 to 19.99 mg/L/0.0 to 90.0 mg/L	Pressure Measurement	Yes
Range, % saturation	0 to 199.9%/0 to 600%	Other Modes	Cal. to Winkler
Resolution, mg/L (ppm)	0.01/0.1	Display	--
Resolution, %Saturation	0.1/1	Inputs	8 pin WP DIN Dual Banana
Relative Accuracy	±0.5% ± 1 digit	Outputs	--
<u>Temperature</u>		Datalogging (points)	--
Range	-5 to 50 °C	Printing capability	--
Resolution	0.1	Battery Power	3AA
Accuracy	± 0.1	Agency Approvals	CE
Salinity Correction	0.0 to 70.0 ppt	Waterproof Rating	IP66

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