

Model 250

pH/mV/ISE Conductivity Meter

A multimeter for electro-chemical analysis!

- Simultaneous four channel measurement
- Selectable pH resolution to 0.001
- Reads conductivity, utilizing automatic cell calibration
- Direct readout of salinity, resistivity and TDS
- Measures ion concentration directly in fixed-point or floating-point notation
- Incremental known-addition type methods for indirect concentration measurements

Auto-ranging conductivity modes. The Model 250 reads conductivity, salinity, resistivity and TDS, and automatically selects the correct range for the sample.

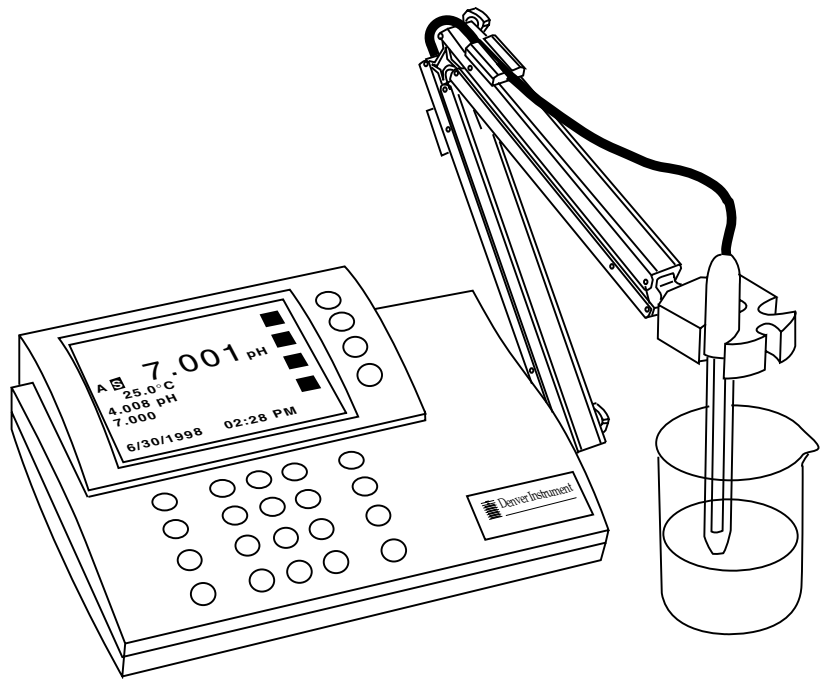
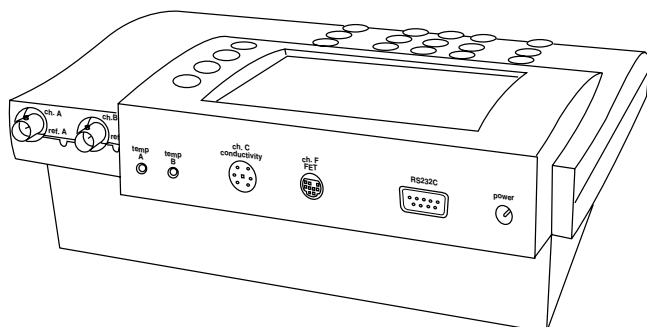
- Covers 0 to 3×10^5 $\mu\text{S/cm}$ conductivity range, in 5 subranges, with readout in $\mu\text{S/cm}$ or mS/cm
- Provides autocalibration of cell constant
- Accepts up to 5 standards
- Measures salinity with range of 0 to 70ppt NaCl equivalent salinity, or 0 to 42ppt practical salinity; resistivity from 30 $\text{ohm}\cdot\text{cm}$ to 20 $\text{megohm}\cdot\text{cm}$; TDS in mg/L
- Menu system lets you select mode/units or choose cell constant
- Use 4-band conductivity cells with integrated temperature sensors

Gives direct ion readout in ppm, ppt, ppb, %, mg/L, $\mu\text{g/L}$, mole/L and ion with units in use displayed. Or enter any units you want; just enter proper standards in fixed-point or floating-point notation. Choose from 18 different ions with units, or enter your own ion name and unit. Get incremental modes for indirect measurements such as known addition/subtraction or analate addition/subtraction.

Want to check the linearity of your Ion Selective Electrode? These meters will show a full graph of the calibration points, as a semi-log plot of mV potential against concentration. Enter up to 7 ion standards to cover a wide range.

Reliable, accurate pH measurements. Model 250 automatically recognizes 22 built-in buffer values with temperature correction. You can enter up to five custom buffers for auto-recognition or enter a buffer manually.

The Model 250 automatically checks your electrode and will warn of any problems before the final results are affected. Select the graph function to obtain an on-screen view of your electrode calibration data, or output complete calibration data to a computer or printer.



Specifications

Mode	Ion	pH	mV
Ranges	1.00×10^{-9} to 9.99×10^9	-2.000 to 20.000	± 1800.0
Resolution	1, 2, 3 significant digits	0.001/0.01/0.1	0.1/1
Relative Accuracy	$\pm 0.17\text{n}\%$	± 0.002	± 0.1
Temperature Measurement		-5.0 to 105°C; relative accuracy, $\pm 0.3^\circ\text{C}$	
Temperature Compensation		Manual, Automatic, -5.0 to 105°C	
Slope Control		Automatic 90 to 105%, Manual 80 to 110%	
Environmental Conditions		15° to 40°C, 0 to 90% Relative Humidity	
Conductivity Mode			
Conductivity Ranges		Cell Constant	
Subrange 5	10cm^{-1}	1.0cm^{-1}	0.5cm^{-1}
Subrange 4	3×10^4 to 3×10^5	3×10^3 to 3×10^4	1×10^3 to 1×10^4
Subrange 3	3×10^3 to 3×10^4	3×10^2 to 3×10^3	1×10^2 to 1×10^3
Subrange 2	3×10^2 to 3×10^3	3×10^1 to 3×10^2	1×10^1 to 1×10^2
Subrange 1	3×10^1 to 3×10^2	3×10^0 to 3×10^1	1×10^0 to 1×10^1
Subrange 1	0 to 3×10^1	0 to 3×10^0	0 to 1×10^1
Relative Accuracy	0.5% of reading		
Salinity Ranges	Autoranging, 0.01 to 70ppt NaCl equivalent salinity		
Resistivity	Autoranging, 0.01 to 42ppt practical salinity		
Total Dissolved Solids	30 $\text{ohm}\cdot\text{cm}$ to 1, 10 or 20 $\text{megohm}\cdot\text{cm}$ (at cell constants of 10, 1, 0.5 cm^{-1} respectively).		
Temp Coefficient	Autoranging units; readout in $\text{ohm}\cdot\text{cm}$, $\text{kilohm}\cdot\text{cm}$, or $\text{megohm}\cdot\text{cm}$. Fixed units: $\text{kilohm}\cdot\text{cm}$		
Power Requirements:	0.005 to 1.5×10^5 mg/L (at 0.5 solids factor, depending on cell constant)		
	Software configurable; Off or On 0 to 4%/°C		
	115V 50/60Hz (Additional voltages available)		

Ordering Information

Meter with kit includes: Meter, power supply, high performance glass-body pH/ATC Free-flow Platinum Junction electrode, electrode arm and operation manual. Order conductivity cells separately.
Meter only includes: Meter, power supply, electrode arm and operation manual.

Meter with Kit **Cat. No. 02-226-121**
Meter Only **Cat. No. 02-226-169**

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