

Conductivity & Temperature Meter

Model 2131

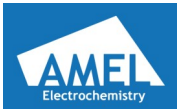
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1 General Description

Model 2131 is the new digital conductivity meter by AMEL, born to bring precision and reliability, typical features of all AMEL instruments over the past 60 years, to a whole new level of flexibility and quality. The instrument uses its microprocessor core to full power, allowing for tuning of the measuring method according to the electrode's needs seeking for unrivalled precision and stability. Model 2131 runs continuously, leading to fast and precise measurements of flowing liquids or rapid evolving systems, along with real-time accuracy. An high speed USB interface allows the user to take full advantage of this stream of accurate data for the most demanding applications. Specifically suited for continuous operation, Model 2131 exhibits a large display, a sturdy yet sensitive keyboard and a splash proof surface that, together with a high quality aluminium case, makes the conductivity meter from AMEL your unstoppable workmate. The high level of automation and the friendliness of many advanced functions make this unit the ideal instrument for research laboratories, industrial applications and quality control analysis. Model 2131 comes with USB interface, high quality universal power supply and integrated electrode stand to satisfy the rising level of expectations of our customers. Try it, today, and put the past behind you.



2 Metrological Properties

Conductivity	0 to 1,9999 μ S/cm	($\pm 0,1$ nS ± 3 digit Resolution)	($\pm 2\%$ Accuracy)
	0 to 19,999 μ S/cm	(± 1 nS ± 3 digit Resolution)	($\pm 1\%$ Accuracy)
	0 to 199,99 μ S/cm	(± 10 nS ± 3 digit Resolution)	($\pm 0,5\%$ Accuracy)
	0 to 1,9999mS/cm	(± 100 nS ± 3 digit Resolution)	($\pm 0,5\%$ Accuracy)
	0 to 19,999mS/cm	(± 1 μ S ± 3 digit Resolution)	($\pm 0,5\%$ Accuracy)
	0 to 199,99mS/cm	(± 10 μ S ± 3 digit Resolution)	($\pm 1\%$ Accuracy)
	0 to 1,9999S/cm	(± 100 μ S ± 3 digit Resolution)	($\pm 1,5\%$ Accuracy)
Resistivity	10G to 1 Ω ·cm	(± 3 digit Resolution)	($\pm 0,5$ to $\pm 2\%$ Accuracy)
Temperature	-20,00 to +120,00 $^{\circ}$ C	(0,01 $^{\circ}$ C Resolution)	($\pm 2^{\circ}$ C upon PT1000 class)
Total Dissolved Solid (TDS)	0 to 1000g/L		
Reference Temperature	0 to 120 $^{\circ}$ C		
Coefficient of Variation	0 to 10%/ $^{\circ}$ C		
Standard Solutions at 25$^{\circ}$C (automatically recognized)	1413 μ S/cm 12880 μ S/cm 111800 μ S/cm		
Temperature Sensor	PT1000		
Cell Constant	0,1 to 32,0		

2.1 Interface

Display	2x 20 characters backlight LCD
Keyboard	8-keys
Calibration Menu	Microprocessor-based system with step-through menu
Communication Interface	USB 1.0 (COM port simulation)

2.2 Power Supply and Dimensions

Voltage Mains	100 to 240V AC $\pm 10\%$ 50/60Hz
Power Consumption	10W maximum
Dimensions (L x W x H)	220 x 210 x 120mm
Weight	1,8kg



3 Accessories and Spare Parts

The following conductivity cells and temperature probes can be used with Model 2131 Conductivity and Temperature Meter, please refer to AMEL's conductivity cells and temperature probes catalogues for drawings and dimensions.

192/K10	Double platinum electrode cell, K = 10cm, glass body
192/K1	Double platinum electrode cell, K = 1cm, glass body
192/K0,1	Triple platinum tip cell, K = 0.1cm, glass body
192/K0,01	Triple platinum tip cell, K = 0.01cm, glass body
2192/K1	Double platinum electrode cell, K = 1cm, glass body, PT1000 temperature probe
196	Double platinum electrode cell, K = 1cm, plastic body, TC100 temperature probe
197	Double platinum electrode cell, K = 1cm, plastic body
2196	Double platinum electrode cell, K = 1cm, plastic body, PT1000 temperature probe
198	Triple platinum ring cell, K = 1cm, glass body
2198	Triple platinum ring cell, K = 1cm, glass body, PT1000 temperature probe
193	Double graphite ring cell for measurements on pastes and muds
194	Glass cell for flow measurements

PT1000 Temperature probe with glass body

PT1000/P Temperature probe with plastic body

Few replacements are needed for everyday use and maintenance of the Model 2131

191/USB	USB cable
191/SUPS9	Power supply for single unit
391/STB	Three electrodes flexible arm holder