



MARTEK® MARK 22 IN SITU CALIBRATOR

MARTEK INSTRUMENTS INC. MANUFACTURERS OF WATER QUALITY INSTRUMENTATION

...for accurate, in situ calibration of on-line conductivity and pH monitors

The Martek Mark 22 In Situ Calibrator is a completely portable analyzer capable of verifying the performance of on-line conductivity and pH monitors. Designed to eliminate grab sample analysis and the inherent errors due to carbon dioxide contamination, the Mark 22 can be calibrated in the laboratory to traceable NIST and ASTM standards, then carried to the sample panel for direct measurement of the sample stream. This light weight analyzer contains its own rechargeable battery power supply, internal clock, memory, and both analog and digital communications port. The Mark 22's large back-lit display provides both raw *and* temperature-compensated data in direct engineering units while its menu-driven software makes calibration and data logging easy and straightforward.

Other Mark 22 features include:

- **Autoranging conductivity measurements**
- **Three user-selectable temperature-compensation formulas for conductivity**
- **Solution compensation for both conductivity and pH**
- **Automatic electronic temperature calibration**
- **Up to four pre-set cell constants**
- **Certified Calibration Plugs for electronic calibration of conductivity**
- **Data storage in non-volatile RAM with RS232 digital output at user-selectable printing intervals**
- **0-1 volt analog recorder output**
- **Removable carrying strap and built-in stand**



While Martek Instruments offers its own certified, unbreakable conductivity reference cells and pH sensor, the Mark 22 can also be used with any conductivity reference cell or pH electrode regardless of manufacturer.

The ability to provide traceable calibration and verification data make the Mark 22 ideal for high purity water processes in nuclear and high-performance fossil fuel power plants; condensate polishing systems and demineralizers, semiconductor and pharmaceutical manufacturing plants; and other industrial applications.



MARTEK MARK 22 SPECIFICATIONS

Parameter	Range	Resolution	Accuracy	Sensor Type
Temperature	0 to 100 °C	0.01 °C	±0.1 °C	Thermoliner array
Conductivity*	0 to 1.0000µS/cm 0 to 10.000µS/cm 0 to 100.00µS/cm 0 to 1000.0µS/cm	0.0001µS/cm 0.001µS/cm 0.01µS/cm 0.1µS/cm	±0.001µS/cm ±0.01µS/cm ±0.1µS/cm ±1.0µS/cm	2-element cell Type 316 SS
pH	0 to 14 pH units	0.01 pH units	±0.1 pH units	Combination glass electrode with double junction reference

*NOTE: The Accuracy of conductivity measurements is dependent on appropriate cell constant in the scale of measurement and on the quality of the electrode.

Power 6 volt internal rechargeable battery pack. 120 or 240 volts AC, 50/60 Hz Battery Charger

Printer Output Serial ASCII RS232C digital output. 0-1 volt DC analog output.

Case Dimensions 6.80 inches (17.27 cm) width x 4.42 inches (11.23 cm) height x 8.60 inches (21.84 cm) depth

Case Weight 8.0 pounds (3.64 kg)

Construction NEMA 12 extruded aluminum enclosure coated to MIL SPECS

ORDERING INFORMATION

P/N		P/N	
182-10	Mark 22 In Situ Calibrator	180-51	Type 316 SS Flow Chamber for pH Sensor
182-21	Conductivity Reference Cell (0-50 µS/cm)	180-51A	pH Adapter Plug for Flow Chamber
182-22	Conductivity Reference Cell (0-1000 µS/cm)	182-25	Carrying Case
182-24T	Temperature Sensor, dip-style		
182-24S	pH Sensor		

NOTE: All prices FOB Factory and include the following warranties against defects in materials or workmanship: **Analyzer-1year, Conductivity Sensors-Lifetime.** Consult factory for specific warranty information. Specifications and prices subject to change without prior notice.



MARTEK INSTRUMENTS, INC.

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