



MARTEK® MARK 24

ULTRAPURE WATER QUALITY ANALYZER

MARTEK INSTRUMENTS INC. MANUFACTURERS OF WATER QUALITY INSTRUMENTATION



*...for accurate, continuous,
in situ monitoring of
multiple ultrapure water
quality parameters*

- Autoranging conductivity measurements
- Autoranging dissolved oxygen measurements (0-20 ppm, 0-2 ppm, 0-200 ppb, 0-20 ppb)
- User-selectable temperature compensation formulas for conductivity
- Solution compensation for both conductivity and pH
- Digital calibration and password protection
- Simultaneous RS232C digital and user-selectable 0-1 or 0-5 volt, and 4-20 mA analog outputs
- Reliable, easy-to-maintain sensor technology

The Martek Mark 24 Ultrapure Water Quality Analyzer provides laboratory accuracy in a multi-channel, multi-parameter on-line instrument for continuous monitoring of high purity water quality. Designed to provide maximum flexibility and value, the Mark 24 provides real-time measurement of up to four separate parameter inputs to permit custom configurations for a variety of process applications. Data is displayed in direct engineering units on a large back-lit display while both digital and analog output signals are available for external recording equipment and control devices.

Designed to withstand harsh environments, the Mark 24 utilizes protected circuitry and a unique power supply to minimize electrical noise and interference associated with process systems.

The ability to collect, process, and transmit real-time data make the Mark 24 ideal for high purity 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 24 SPECIFICATIONS

Parameter	Range	Resolution	Accuracy	Sensor Type
Temperature	0 to 100°C	0.01°C	±0.10°C	Thermolinear array
Conductivity	0 to 2.0000µS / cm 0 to 20.000µS / cm 0 to 20.000µS / cm 0 to 200.00µS / cm 0 to 200.00µS / cm 0 to 2000.0µS / cm	0.0001µS / cm 0.001µS / cm 0.001µS / cm 0.01µS / cm 0.01µS / cm 0.1µS / cm	±0.001µS / cm ±0.01µS / cm ±0.01µS / cm ±0.1µS / cm ±0.1µS / cm ±1µS / cm	2-element cell Type 316 SS
pH	0 to 14 pH	0.01 pH	±0.1 pH	Combination glass electrode with double junction reference
ORP	±1400 mV	±1.0 mV	±10.0 mV	
Dissolved Oxygen	0 to 20 ppm 0 to 2 ppm 0 to 200 ppb 0 to 20 ppb	0.01 ppm 0.001 ppm 0.1 ppb 0.01 ppb	±0.1 ppm ±0.01 ppm ±1 ppb ±0.1 ppb	Galvanic cell with platinum-lead electrode
HCl, H ₂ SO ₄ or NaOH	0 to 10% by weight	0.01%	±0.2%	2-element insertion-style cell. Type 316 SS

Power	120 or 240 volts AC, 50 / 60 Hz with fuse protection
Printer Output	Serial ASCII RS232C and isolated analog output of 0 -1, 0 - 5 volts, or 4 - 20mA DC full scale standard
Case Dimensions	6.8 inches (17.27cm) width X 4.42 inches (11.23cm) height X 8.60 inches (21.84cm) depth behind front surface panel
Case Weight	8.0 pounds (3.64 kg)
Mounting	Hardware supplied for panel mounting
Construction	NEMA 12 aluminum enclosure coated to MIL SPECS

ORDERING INFORMATION

P/N	P/N
184-10 Mark 24 Monitor (four channel)	180-26 ORP Sensor Assembly with preamp
180-21-1 Conductivity Flow-thru Sensor with preamp for ranges 0 - 2 & 0 - 20 µS / cm	180-27 Dissolved Oxygen Sensor with preamp
180-21-2 Conductivity Flow-thru Sensor with preamp for ranges 0 - 20 & 0 - 200 µS / cm	180-28 NaOH (Caustic) Insertion Cell with preamp
180-22 Conductivity Flow-thru Sensor with preamp for ranges 0 - 200 & 0 - 2000 µS / cm	180-29 H ₂ SO ₄ (Acid) Insertion Cell with preamp
180-24 pH Sensor Assembly with preamp	180-29H HCl (Acid) Insertion cell with preamp
	180-51 Type 316 SS Flow Chamber for pH / DO sensor

NOTE: All prices FOB Factory and include the following warranties against defects in materials or workmanship: **Analyzer and Preamps-5 years, Conductivity Sensors-Lifetime, Dissolved Oxygen sensors-5 years.** Consult factory for specific warranty information. Specifications and prices subject to change without prior notice.



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