



INDIAN INSTITUTE OF TECHNOLOGY BOMBAY
MATERIALS MANAGEMENT DIVISION
Powai, Mumbai - 400076

PR No. 1000035814

Rfx No. 6100001546

Technical Specification for Portable Velocity Meter

Sl. no.	Description	Quantity	Compliance (YES/NO)	Vendor's Remark
1	<p>Portable Velocity Meter with 20' Cable Accuracy 2: $\pm 2\%$ of reading ± 0.05 ft/s (± 0.015 m/s) through the range of 0 - 10 ft/s (0 - 3.04 ms/s); $\pm 4\%$ of reading from 10 - 16 ft/s (3.04 - 4.87 m/s) Battery Life: heavy typical day use; 68°F (20°C) Cable Length: 20 ft Data Storage: Data storage for up to 10 profiles with 32 stations per profile. Dimensions: 8.6" L x 3.7" W x 2.1" H (21.8 L x 9.3 W x 5.3 H cm) Display: LCD: Color, LCD; 3.5" QVGA, transfective (readable in direct sunlight) Environmental Rating: IP67 Keypad: Alpha-numerica Kit: Yes Material: Polycarbonate with a thermoplastic elastomer (TPE) overmold Operating temperature range: -20 - 55 °C Parameter: Velocity Probe Type: Velocity Range: 0 - +20 ft/s Storage conditions: -20 °C to 60 °C Warranty: 12 months from the date of delivery</p>	2		
2	<p>Digital Reactor Block Compliance Certifications: CE, cTUVus Depth: (12.2 in.) Dimensions (H x W x D): 145 mm x 250 mm x 310 mm Heating Rate: 20 to 150 °C in 10 minutes Height : (5.7 in.)</p>	3		



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	<p>Number of cuvettes: 21 vials x 16 mm + 4 vials x 20 mm Operating temperature range: 10 - 45 °C Power requirements (Hz): 50 - 60 Hz Power requirements (Voltage): 230 V AC Temperature Range: 37 - 165 °C (99 - 329 °F) Temperature Stability: ± 2 °C Warranty: 12 months from the date of delivery</p>			
3	<p>LDO PROBE/Optical Dissolved Oxygen (DO) Sensor, 1 m Cable Accuracy: ±0.1 mg/L from 0 to 8 mg/L ±0.2 mg/L for greater than 8 mg/L Cable Length: 1 m Electrode Type: Luminescent Dissolved Oxygen Interferences: Kit: No Length: 191 mm Method Type: Laboratory: Luminescent Dissolved Oxygen Parameter: Dissolved Oxygen (DO) Pressure accuracy: ±0.8% Pressure Resolution: 1 mbar (1 hPa) Probe Type: Standard Product Kit: Model: LDO101 Accessories Included: None Range: 0.05 - 20.0 mg/L, 1 - 200% saturation Resolution: 0.01/0.1 (5 digits max.) Sample depth: 10 mm Saturation resolution: 0.1 % Sensor material: Polycarbonate / ABS Sensor Type: Lumiphore Temperature Accuracy: ±0.3 °C Temperature Range: 0 - 50 °C Temperature Resolution: 0.1 °C Test requirements: Parameter Needed: Dissolved Oxygen</p>	3		



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	Minimum Sample Depth (mm): 10 Thermistor: n (ATC)			
4	<p>CONDUCTIVITY PROBE/4-Poles Graphite Conductivity Cell</p> <p>Accuracy: Cond: $\pm 0.5\%$ of reading Salinity: ± 0.1, ± 1 digit TDS: $\pm 0.5\%$ ± 1 digit Cable Length: 1 m Electrode Type: Conductivity Cell; 4 Poles - Graphite Kit: No Length: 184 mm Method Type: Laboratory: 4 Poles - Graphite Parameter: Conductivity Probe Type: Standard Product Kit: Model: CDC401 Accessories Included: None Range: Conductivity: 0.0 $\mu\text{S}/\text{cm}$ - 200 mS/cm TDS: 0.00 mg/L - 50.0 g/L as NaCl Salinity: 0 - 42 ppt or ‰ Resistivity: 2.5 Ωcm - 49 $\text{M}\Omega\text{cm}$ Resolution: 0.01/0.1 (5 digits max.) Sample depth: 45 mm Sensor material: Noryl Sensor Type: 4-poles conductivity probe, Graphite, $k = 0.40 \text{ cm}^{-1}$ Temperature Accuracy: $\pm 0.3 \text{ }^\circ\text{C}$ Temperature Range: "-10 - 110 $^\circ\text{C}$" Temperature Resolution: 0.1 $^\circ\text{C}$ Test requirements: Parameter Needed: Conductivity Minimum Sample Depth (mm): 45 Thermistor: n (ATC)</p>	3		
5	<p>pH Probe/Refillable pH Electrode WITH 1 METER CABLE</p> <p>Accuracy: $\pm 0.02 \text{ pH}$ Application: Clean & Dirty Samples Cable Length: 1 m Electrode Type: Refillable Reference</p>	3		



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	<p>Element Filling Solution: 3 M KCl solution saturated with AgCl (#2841700) Junction: Porous Pin Junction Kit: No Length: 175 mm Method Type: Laboratory: Refillable Reference Element Parameter: pH Probe Type: Standard Product Kit: Model: PHC301 Accessories Included: None Range: 0 - 14 pH Reference Type: Ag/AgCl Resolution: 0.001/0.01/0.1 Sample depth: 15 mm Sensor material: Zeonor Sensor Type: pH Glass Sodium (Alkalinity) error: -0.6 pH at pH 12.6 in 1 M NaOH Special Feature: Double junction reference Temperature Accuracy: ± 0.3 °C Temperature Range: 0 - 50 °C Temperature Resolution: 0.1 °C Test requirements: Parameter Needed: pH Minimum Sample Depth (mm): 15 Thermistor: n (ATC)</p>			
6	<p>DIGITAL TITRATOR Accuracy: ± 1 % (Uncertainty of readings is 1 digit. Most samples require more than 100 digits) Includes: Digital Titrator only</p>	3		
7	<p>COD DIGESTION VIAL, HR HW PK/25 Range-20 - 1500 mg/L COD</p>	64		
8	<p>SULFAVER 4, SULFATE RGT PK/100 Range-2 - 70 mg/L SO₄²⁻</p>	16		
9	<p>NITRAVER 5 PWD PLWS 10ML PK/100 Range-0.3 - 30.0 mg/L NO₃-N</p>	16		
10	<p>KTO: REAGENT SET, NITROGEN-AMMONIA Range-0.02 - 2.50 mg/L NH₃-N</p>	8		



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11	TNT, TOTAL PHOSPHORUS 50 TESTS Range-0.06 - 3.50 mg/L PO	32		
12	KTO: REAGENT SET, CLRM CHLORIDE Range-0 - 25.0 mg/L Cl ⁻	16		
13	REAGENT SET, ALKALINITY F/DT KIT 10 - 4000 mg/L CaCO ₃	16		
14	REAGENT SET, HARDNESS 100-4000 100 - 4000 mg/L CaCO ₃	16		
15	SPADNS REAGENT SOLN, 500ML 0.02 - 2.00 mg/L F-	16		