

BATAAN PENINSULA STATE UNIVERSITY

Balanga City, Bataan

OFFICIAL BIDDING FORM

Item No.	QTY	Unit	SPECIFICATIONS	OFFER; (Brand)	Unit Cost	Total Cost
1	lot	1	Physicochemical Water Quality Analysis Equipment			
1		1	<p>Dual Channel pH/ORP/Cond/TDS/Res/Sal/Temp Benchtop Water Quality Meter</p> <p>Features</p> <p>Large Black & White static LCD</p> <p>Large font-size for primary measurement value</p> <p>Soft-touch keypad</p> <p>Memory function</p> <p>ATC with temperature calibration</p> <p>Auto Shut-off (1 to 30 minutes)</p> <p>Auto-hold and stability indicator</p> <p>Password lock</p> <p>Calibration data print for GLP/GMP compliance</p> <p>New integrated electrode stand</p> <p>USB or RS232 connecting to PC/printer</p> <p>Small footprint</p> <p>Technical Specifications</p> <p>pH range - -2.000 to 19.999 pH</p> <p>Resolution - 0.1/0.01/0.01 pH</p> <p>Accuracy - ± 0.003 pH</p> <p>Cal Points - 5</p> <p>Buffer Options - USA/NIST/Custom</p> <p>ORP Range - ± 1999.9 mV</p> <p>Resolution - 0.1 mV</p> <p>Accuracy - ± 0.2 mV</p> <p>EC Range</p> <p>.. $\mu\text{S/cm}$ to 19.99 $\mu\text{S/cm}$</p> <p>.. $\mu\text{S/cm}$ to 1999.0 $\mu\text{S/cm}$.. $\mu\text{S/cm}$ to 20.00 $\mu\text{S/cm}$</p> <p>.. $\mu\text{S/cm}$ to 200.00 $\mu\text{S/cm}$</p> <p>Resolution - 0.05% F.S.</p> <p>Accuracy - $\pm 0.6\%$ F.S ($\pm 1.5\%$ F.S > 18.0 ms/cm)</p> <p>Ref. Temp - 15 to 30 deg C (Selectable)</p> <p>Temp. Coefficient - 0.01 to 10.0% (Selectable)</p> <p>Cell Constants - 0.1/1.0/10/0</p> <p>Cal Points - 4</p> <p>Units Setting - Auto Ranging/Manual/$\mu\text{S/cm}$ or mS/cm or S/m</p> <p>TDS Range</p> <p>0.01 ppm to 9.99 ppm</p> <p>0.1 ppm to 999.9 ppm</p> <p>1 ppm to 10.00 ppm</p> <p>10 ppm to 100.00 ppm</p> <p>Resolution - 0.01 ppm / 0.1 ppt</p> <p>Accuracy - $\pm 0.1\%$ F.S</p> <p>TDS Curves - EN27888, 442, linear (0.40 to 1.0)</p> <p><i>See Next Page</i></p> <p>Resistivity Range - 0.000 Ω/cm to 20.000 Ω/cm 0.00 Ω/cm to 200.0 Ω/cm</p> <p>Resolution - 0.05% F.S.</p> <p>Accuracy - 0.06% F.S. ($\pm 1.5\%$ F.S > 1.80 MΩ/cm)</p> <p>Salinity Range - 0.0 to 100.0 ppt/0.00 to 10.00%</p> <p>Resolution - 0.1 ppt/0.1%</p> <p>Accuracy - 0.2% F.S.</p>			

			<p>Cal Curves - NaCl/Sea Water</p> <p>Temperature - -30.0 to 130 deg C Resolution - 0.1 deg C Accuracy - ± 0.4 °C</p> <p>Accessories Included 1 unit - Refillable, glass-body pH electrode with integrated temperature sensor 1 unit - Plastic body, k - 1.0 conductivity cell 1 set - pH Buffer Set (pH 4.01, 7.01, 10.01 3.33 KCL solutions at 250 ml each 1 set - Conductivity Standard Solution Set (84 μS/cm, 1413 uS/cm, 12.88 mS/cm, 111.9 mS/cm solutions), 250ml each 1 unit Electrode Stand</p>			
2		1	<p>Multi-parameter Water Quality Meter with GPS</p> <p>Specifications & Features Automatic calibration Water resistance: JIS protection level 7 or better GPS At least ten 10 water quality parameters: pH Range: 0-14 Resolution: 0.01pH or better Accuracy: ± 0.1pH or better Oxidation Reduction Potential (ORP) Range: ± 2000 mV Resolution: 1 mV or better Accuracy: ± 15 mV or better Dissolved Oxygen (DO) Range: 0 to 50.0 mg/L Resolution: 0.01 mg/L or better Accuracy: ± 0.5 mg/L or better Automatic temperature compensation Conductivity (COND) Range: 0 to 100 mS/cm Accuracy: $\pm 1\%$ F.S. or better Automatic range detection and temperature conversion Salinity Range: 0 to 70 PPT Resolution: 0.1 PPT or better Accuracy: ± 3 PPT or better Total Dissolved Solid (TDS) Range: 0 to 100 g/L Resolution: 0.1% F.S. or better Accuracy: ± 5 g/L or better Seawater specific gravity Range: 0 to 50 σ_t Resolution: 0.1 σ_t or better Accuracy: ± 5 σ_t or better Temperature Range: -5 to 55°C Resolution: 0.01°C or better Accuracy: $\pm 0.3 + 0.005 t$ or better Turbidity (TURB) Range: 0 to 800 NTU or better Resolution: 0.1 NTU or better Accuracy: ± 1 NTU or better Water depth Accuracy: ± 0.3 m or better</p>			
3		1	<p>Double - Beam UV - Vis Spectrophotometer</p> <p>Optical System Czerny-Turner mount, Double beam monochromator Wavelength range 190 to 1100 nm Spectral band width 1 nm or better Stray Light 198 nm (KCl): 1.0% or less 220 nm (NaI): 0.05% or less 340 nm (NaNO2): 0.05% or less Wavelength accuracy ± 0.3 nm (Xe: 260.6, 484.3, 881.9 nm, Hg: 253.7, 435.8, 546.1 nm)</p>			

			<p>Wavelength repeatability ±0.1 nm</p> <p>Photometric range Abs: -3.3 to 3.3 %T: 0 to 300</p> <p>Photometric accuracy ±0.002 Abs (0 to 0.5 Abs) ±0.004 Abs (0.5 to 1.0 Abs)</p> <p>Photometric repeatability ±0.002 Abs (0 to 1.0 Abs)</p> <p>Scan speed 10, 40, 100, 200, 400, 800, 1200, 2400, 4800, 6000 nm/min</p> <p>Wavelength drive speed 8500 nm/min</p> <p>Response Fast, Medium, Slow</p> <p>Baseline Stability 0.0005 Abs/h (at 260nm)</p> <p>Noise level 0.0001 Abs (RMS, 260 nm, 0 Abs)</p> <p>Baseline flatness ±0.0009 Abs (200 to 950 nm)</p> <p>Light source Xenon flash lamp 5W (light source is guaranteed for 7 years)</p> <p>Detector Silicon photodiode</p> <p>Cell holder Automatic 6-cell turret</p> <p>Interface LAN Port: connected to a router or PC USB Port: connected to a USB memory for use when transferring CSV-format files</p> <p>Software functions 6-cell mode setting function, Automatic monitor power-off time setting function, Intelligent start function, Measurement modes, Data/measurement condition saving functions, File search function, Maintenance functions (Wavelength calibration, Lamp usage time monitoring, Sample chamber opening/closing detection, Performance evaluation, Maintenance history storage), Data processing functions, Output capability</p> <p>Computer System Desktop PC (Windows 10, 64 bit) 5 GB Storage</p> <p>Warranty One year on parts and service</p> <p>Others 1. Vendors must have at least 1 trained engineer and 1 application chemist dedicated to the instrument 2. Certificate of Distributorship from Principal Supplier</p>			
2	lot	1	Water Quality Testing Auxilliary Equipment			
1		1	<p>Tube Test Heater - COD Digester</p> <p>Technical Specifications</p> <p>Temperature range: 30 deg C to 200deg C Temperature stability: 1deg C @ 100 deg C by 120 minutes test Temperature uniformity: < 0.5 deg C @ 100 degC Temperature accuracy: < 1 deg C @ 100 deg C (@ 230V / 50Hz, 115V / 60Hz)</p> <p>Temperature controller: Pre-calibrated Display and control: Two large size four digit LED display Temperature calibration: Built-in and pre-calibrated Heating rate: <18 minutes from ambient to 100 deg C @ 230V, 50Hz</p> <p>Number of blocks: 1 Heat power (Watt): 250 W Over temperature cutoff: 212 deg C Timer: 0 - 999 minutes Power: 120 / 60Hz; 230V / 50Hz, voltage variation < 2% Cabin dimensions (mm): 102 x 78 x 46 (W x D x H) Physical dimensions (mm): 310 x 250 x 80 (W x D x H) Weight without block (kg): 3.3 Certification: CE</p>			

