Bid Number: GEM/2018/B/114537
Dated: 05-11-2018

Bid Document

Bid Details	
Bid End Date/Time	22-11-2018 11:00:00
Bid Validity	90 (Days)
Ministry/State Name	Ministry Of Mines
Department Name	Na
Organization Name	Geological Survey Of India (gsi)
Office Name	Mcsd Opec 1
Total Quantity	1
Item Category	Water Quality Meters / Analyzers
Average Turn Over of Last 3 Years	5 Lakh (s)
Experience with Gov. Required	3 Year (s)
MSE Exemption For Years Of Experience And Turnover	Yes

Water Quality Meters / Analyzers (1)

Technical Specifications

* As per GeM Category Specification

Specification	Specification Name	Values	Allowed Values
TYPE / NOMENCLATURE / PROTECTION	**Type of Meter / Analyzer**	Handheld	Bench Type , Handheld
	Functional nomenclature	Multi Parameter Water Quality Analyzer	Dissolved Oxygen Meter , Salinity Meter , ORP Meter , TDS Meter , Turbidity Meter , pH Meter , Multi Parameter Water Quality Analyzer
	Ingress Protection (Main Unit)	IP 67	IP 55 , IP 56 , IP 57 , IP 65 , IP 66 , IP 67 , IP 68 , NA being Bench Top
	Calibration	Manual	Manual , Automatic
MEASURED WATER QUALITY PARAMETERS	**Dissolved Oxygen (DO)**	true	true , false
	DO % Stauration	true	true , false

	Conductivity	true	true , false
	Resistivity	true	true , false
	Salinity	true	true , false
	Total Dissolved Solids (TDS)	true	true , false
	pH	true	true , false
	Oxidation Reduction Potential (ORP)	true	true , false
	Ammonium	true	true , false
	Nitrate	true	true , false
	Chloride	true	true , false
	Turbidity	true	true , false
	Depth	false	true , false
	Temperature	true	true , false
	Atmospheric Pressure	true	true , false
MEASUREMENT OF DISSOLVED OXYGEN (DO) / DO % Saturation	**Dissolved Oxygen (DO) measurement Principle**	Optical	Optical , Electro Chemical (Amperometric) , NA
	Sensor / Probe/ Electrode Type	NA	Lifetime Luminiscent for Optical , Polarographic for Electro Chemical , Galvanic for Electro Chemical , NA
	Measurement Range for DO Content (in ppm or mg/l)	0-20	*
	Resolution (in ppm or mg/l)	0.01,0.02,0.05,0.1,0.2, 0.5	*
	DO Accuracy (+/-)	1.5	*
	Measurement Range for DO % Saturation (in %)	0-200	0-200 , 0-400 , 0-500 , 0-600 , 0-800 , NA
	Resolution (in %)	0.1,0.2,0.5	*
	DO % Accuracy (+/-)	0.1	*
MEASUREMENT OF CONDUCTIVITY (EC)	**Conductivity measurement principle**	Conductive (contacting)	Conductive (contacting) , Inductive , NA
	Sensor/ Probe/Electrode Type	NA	2 Cell Electrode , 4 Cell Electrode , NA
	Material of Electrode	NA	Platinum , Titanium , Gold Plated Nickel , Graphite , NA

	Measurement Range (in µS/cm)	0-20	*
	Resolution (in mho or µS/cm)	0.001,0.002,0.005,0.01 ,0.02,0.05,0.1	*
	EC Accuracy (+/-)	1	*
MEASUREMENT OF RESISTIVITY	**Resitivity measurement principle**	NA	Conductivity Conversion , NA
	Lowest Measurement Value for Resistivity (in ohm-cm)	NA	0 , 1 , 2 , 5 , 10 , NA
	Highest Measurement Value for Resistivity (in Mega ohm-cm)	NA	1 , 2 , 5 , 10 , 20 , 50 , 100 , 200 , NA
	Resolution (in ohm-cm)	1	*
	Resistivity Accuracy(+/-)	1	*
MEASUREMENT OF SALINITY	**Salinity measurement principle**	Conductivity Conversion	Conductivity Conversion , NA
	Measurement Range (in parts per thousand or g/l or PSU)	0-70	*
	Resolution (in g/l)	0.01	*
	Salinity Accuracy (+/-)	0.1	*
MEASUREMENT OF TOTAL DISSOLVED SOLIDS (TDS)	**TDS measurement principle**	Conductivity Conversion	Conductivity Conversion , NA
	TDS Measurement Range (in parts per thousand or g/l)	0-200	0-100 , 0-200 , 0-400 , 0-500 , 0-600 , 0-800 , NA
	Resolution (in g/l)	0.001	*
	TDS Accuracy (+/-)	1	*
MEASUREMENT OF pH	**pH measurement principle**	Electro chemical	Electro chemical , NA
	Sensor / Probe / Electrode Type	NA	Hydrogen (Platinum) Electrode , Antimony Electrode , Glass Electrode , Ion Selective Electrode (ISE) , NA
	Number of Sensors / Electrodes	Single Electrode	Single Electrode , Combination Electrode (2 Electrode) , Differential Electrode (3

			Electrode) , NA
	pH Measurement Range	0-14	0-14 , NA
	Resolution (in pH number)	0.01	*
	pH Accuracy (+/-)	1	*
MEASUREMENT OF OXIDATION REDUCTION POTENTIAL (ORP)	**ORP measurement principle**	Electro chemical	Electro chemical , NA
	Sensor / Probe/ Electrode Type	NA	Platinum Electrode , Ion Selective Electrode (ISE) , NA
	Number of Sensors /Electrodes	NA	Single Electrode , Combination Electrode (2 Electrode) , Differential Electrode (3 Electrode) , NA
	Lowest Measurement Value for ORP (in mV)	-2000	-3000 , -2500 , -2000 , -1500 , -1000 , -500 , 0 , NA
	Highest Measurement Value for ORP (in mV)	2000	3000 , 2500 , 2000 , 1500 , 1000 , 500 , NA
	Resolution (in ± mV)	0.01	*
	ORP Accuracy (+/-)	1	*
MEASUREMENT OF AMMONIUM	**Sensor / Probe/ Electrode Type**	Ion Selective Electrode	Ion Selective Electrode , NA
	Measurement Range (in ppm or mg/l)	0-200	0-100 , 0-200 , 0-300 , 0-400 , 0-500 , 0-600 , NA
	Resolution (in ppm or mg/l)	0.005,0.01,0.02,0.05,0.1	*
	Ammonium Accuracy (+/-)	1	*
MEASUREMENT OF NITRATE	**Sensor / Probe/ Electrode Type**	Ion Selective Electrode	Ion Selective Electrode , NA
	Measurement Range (in ppm or mg/l)	0-200	0-100 , 0-200 , 0-300 , 0-400 , 0-500 , 0-600 , NA
	Resolution (in ppm or mg/l)	0.005,0.01,0.02,0.05,0.1,0.2	*
	Nitrate Accuracy (+/-)	1	*
MEASUREMENT OF CHLORIDE	**Sensor/Probe/Electrode Type**	Ion Selective Electrode	Ion Selective Electrode , NA
	Measurement Range (in ppm or mg/l)	0-400	0-400 , 0-600 , 0-800 , 0-1000 , 0-1200 , 0-1500 , NA

	Resolution (in ppm or mg/l)	0.005,0.01,0.02,0.05,0.1,0.2	*
	Chloride Accuracy (+/-)	1	*
MEASUREMENT OF TURBIDITY	**Turbidity measurement principle**	NA	Nephelometric measurement according to ISO 7027 , Nephelometric measurement according to US EPA 180.1 , NA
	Light Source	NA	Infrared Led , White light tungsten lamp , NA
	Measurement of scattered light	NA	30 degree scatter nephelometer , 90 degree scatter nephelometer , NA
	Lowest Measurement Value for Turbidity (in FNU or NTU)	0.01	0.01 , 0.05 , 0.1 , 0.5 , 0 , NA
	Highest Measurement Value for Turbidity (in FNU or NTU)	NA	*
	Resolution (in FNU or FTU)	0.01	*
	Turbidity Accuracy (+/-)	1	*
MEASUREMENT OF TEMPERATURE	**Sensor/Probe Type**	NA	Semi Conductor Based Thermister , Resistance Temperature (RTD) Detector , NA
	Lowest Measurement Value for Temperature (˚C)	-5	-20 , -15 , -10 , -5 , 0 , 5 , 10 , NA
	Highest Measurement Value for Temperature (˚C)	55	*
	Resolution (˚C)	0.005,0.01,0.02,0.05,0.1,0.2	*
	Temperature Accuracy (+/-)	1	*
MEASUREMENT OF PRESSURE	**Sensor /Probe Type**	NA	Pressure transducer , NA
	Lowest Measurement Value for Pressure (in	450	*

	mmHg)		
	Highest Measurement Value for Pressure (in mmHg)	850	800 , 825 , 850 , 875 , 900 , 950 , 1000 , NA
	Resolution (in mmHg)	0.1,0.2,0.5,NA	*
	Pressure Accuracy (+/-)	1	*
MEASUREMENT OF DEPTH	**Measurement Method**	NA	Water Pressure method , NA
	Depth Measurement Range (in meters)	0-10	*
	Length of Cable connecting peobe (inclusive in the scope of supply)	4	*
COMPENSATION / CORRECTION	**Temperature correction**	Automatic	Automatic , Manual , Automatically compensates for manual input value , NA
	Salinity Correction	Automatic	Automatic , Manual , Automatically compensates for manual input value , NA
	Barometric Pressure correction	Manual	Automatic , Manual , Automatically compensates for manual input value , NA
DISPLAY / STORAGE	Type of Display	LCD with Backlight	*
	Display Digit Size	30	*
	Number of Digits in Display	3	*
	Number of parameters diplayed simultaneously	4	*
	Memory (in Data Sets)	20000	*
	Internal memory (GB)	64	*
	In-built GPS	true	*
	Date /time Stamp in Entries	true	*
	Connectivity interface	USB,RS 232,NA	*
POWER SOURCE	Power Source	Alkaline Batteries (Non-Rechargeable),Rechargeable Battery	*

	Battery Size, if Non Rechargeable Battery	Type-C	*
	Battery Chemistry, if Rechargeable Battery	Ni-MH	*
	Voltage of each Battery	4.1	*
	Number of Batteries required for operation	1	*
	Number of Batteries Inclusive in the Scope of Supply	1	*
	Battery Capacity (mAh)	4.1	*
	Battery Life	90	*
	Suitable Adapter to be supplied to make the equipment Work on 230 V ± 10 %, 50 Hz	false	*
GENERIC	Armour housing of Sensor / Probe	Rubberised metallic	*
	Probe / Sensor / Electrode supplied with equipment	true	*
	Number of elctrodes supplied	1	*
	Weight	775	*
	Dimensions (mm x mm x mm)	-	*
	Carry Case included in the scope of supply	true	*
	List of Items and Quantity of each item included in the offer	-	*
OPERATING CONDITIONS	**Minimum Operating Temperature**	-5	0 , -5 , -10 , -15 , -20
	Maximum Operating Temperature	55	50 , 55 , 60 , 70
	Operating Humidity, Rh at 40 deg C	95	65 , 70 , 75 , 80 , 85 , 90 , 95
WARRANTY	**Warranty on Equipment**	1	1 , 2 , 3 , 4 , 5 , 6
	Warranty on Probe / Electrode	12	6 , 12 , 18 , 24 , 30 , 36 , 48
	Warranty on Cables for Connecting Probe	1	1 , 2 , 3 , 4 , 5
CERTIFICATION	**Availability of Test Reports from Central Govt / NABL**	true	true , false

	approved / ILAC accredited Lab to prove conformity to the specification		
	If Yes, Test Report to be furnished to the Buyer on demand	Yes	*
	Test Report No and Date	-	*
	Name of the Lab and Address	-	*

* Bold specifications are the golden parameters.

Consignees and Quantity

S.No.	Consignee	Address	Quantity	Delivery Days
1	Sukumar Das	700091,M&CSD, Geological Survey of India, 9th Floor, Bhu-Bijnan Bhavan, DK- 06 , Salt Lake, Sector-II, Kolkata-700091	1	15

EMD Detail

Required	No

ePBG Detail

Required	No

Splitting

Bid splitting not applied.

Buyer Specific Additional Terms and Conditions

1. **Scope of supply (Bid price to include all cost components) :** Supply Installation Testing and Commissioning of Goods
2. **Dedicated toll Free Telephone No. for Service Support :** BIDDER /OEM must have **Dedicated toll Free Telephone No. for Service Support**
3. **Timely Servicing / rectification of defects during warrantee period:** After having been notified of the defects / service requirement during warrantee period, Seller has to complete the required Service / Rectification within time limit specified. If the Seller fails to complete service / rectification with defined time limit, a penalty of defined % of Unit Price of the product shall be charged as penalty for each week of delay from the seller. Seller can deposit the penalty with the Buyer directly else the Buyer shall have a right to recover all such penalty amount from the Performance Security (PBG).
   (i) Time Limit for Service / Rectification of defects will be as defined in the SLA document for the service.
   (ii) Penalty per week of delay as % of unit price of product will be as defined in the SLA document for the service.
   Seller to give compliance Yes / No while submitting bid.

This Bid is also governed by the General Terms and Conditions

---Thank You---