



## Annexure-I


### **Pre-Qualification Requirements (PQR)**


1. The Bidder should have a Turnover (T.O.) of minimum Rs. 6.0 Lacs/year in last 03 (Three) years (2018-19, 2019-20 & 2021-21). The self-attested copies of balance sheet and Profit and Loss account showing the turn over (T.O.) Value or CA certified document should be submitted as proof.
2. The Bidder should have supplied the item which is being quoted against our enquiry in last 03 years from the Bid opening date. The self-attested **copies** of Purchase Orders, placed on them by customers & proof of supply should be attached.
3. Detailed printed Catalogue/Technical Data Sheet of the offered item must be provided along with the offer submitted.
4. In case of Agent/Reseller/Traders, offering equipment from OEM, Tender specific authorization letter required from the manufacturer, clearly indicating contact details like Name, E-mail & address of manufacturer.

दिनांक एवं हस्ताक्षर SIGN & DATE		<p style="text-align: center;">उत्पाद क्रय विनिर्देश</p> <p style="text-align: center;"><b>PRODUCT PURCHASE SPECIFICATION</b></p>	<b>PR00009</b>			
SUPERSEDES INVENTORY NO. सामग्री सूची संख्या को			पृष्ठ	3	का	1
स्वत्वाधिकार एवं गोपनीय इस प्रलेख में दी गई सूचना भारत हेतु इलेक्ट्रिकल्स की सम्पत्ति है। इसका प्रलेख एवं अप्रलेख रूप से किसी भी तरह प्रयोग, जो कि कंपनी के हित में हानिकारक हो न किया जाए।	<p>बिना संशोधन के। The information on this document is the property of Bharat Heavy Electrical Limited. It must not be used directly or indirectly in any way detrimental to the interest of the company.</p>	<p><b>1.0 Name of Equipment : pH Meter (Bench Top)</b></p> <p><b>2.0 APPLICATION:</b> pH is a measurement of the acidity or alkalinity of a substance (generally liquid). pH Meter is required to measure pH of water and other liquid samples. pH meter with Automatic read function with easy calibration and user interface and calibration timer.</p> <p><b>3.0 General :</b> pH meter shall be microprocessor based Bench Top model and tough construction. Meter shall be user friendly with minimal keystrokes and touch-key commands, simple to calibrate and use. Meter shall have built-in electrode holder to hold the platinum pH electrode during the transport /storage. Meter shall operate on 230V.</p> <p><b>3.0 SPECIFICATIONS OF EQUIPMENT :</b></p> <p><b>3.01 Range:</b></p> <p>(i) pH : 0.0 To 14.0</p> <p>(ii) mV : ± 2000 mV</p> <p>(iii) Temperature : -10 to 110 °C (-50 to 230 °F)</p> <p><b>3.02 Resolution:</b></p> <p>(i) pH : 0.1; 0.01 (selectable)</p> <p>(ii) mV : 0.1</p> <p>(iii) Temperature : 0.1°C</p> <p><b>3.03 Accuracy:</b></p> <p>(i) pH : ≤ 0.02</p> <p>(ii) mV : ± 0.2 mV or ± 0.05% (whichever is greater)</p> <p>(iii) Temperature : ± 0.3 °C at 0-70 °C; ± 1.0 °C at 70-110 °C</p> <p><b>3.04 Output</b> : One way, RS-232</p> <p><b>3.05 Inputs</b> : One BNC; One 5-pin connector, One 2 mm singlepin reference connector</p> <p><b>3.06 Input Impedance</b> : &gt; 10<sup>12</sup> Ohms</p>	Page	1	of	3
दिनांक एवं हस्ताक्षर SIGN & DATE						



दिनांक एवं हस्ताक्षर SIGN & DATE		उत्पाद क्रय विनिर्देश		<b>PR00009</b>	
		PRODUCT PURCHASE SPECIFICATION		पृष्ठ Page	3 3
सामग्री सूची संख्या को SUPPERSEDES INVENTORY NO.	<p><b>6.0 General Terms &amp; Conditions</b></p> <p><b>6.1 Document :</b> One hard copy of O&amp;M manual in English language giving complete technical information for operation and maintenance of the equipment shall be supplied.</p> <p><b>6.2 Installation and Commissioning :</b> The supplier shall install &amp; commission the equipments at sites. Supplier should demonstrate the performance of the Equipment and all its accessories to ensure compliance with complete specifications &amp; parameters quoted by them to the satisfaction of BHEL/end user.</p> <p><b><i>Failing to comply to the Installation and Commissioning clause, the offer will be rejected straightaway.</i></b></p> <p><b>6.3 Guarantee/ Warranty :</b> The Equipment shall be guaranteed / warranted for a period of 36 months from the date of dispatched &amp; 24 months from the date of I &amp; C whichever is earlier.</p> <p><b><i>Failing to comply to the Guarantee / Warranty clause, the offer will be rejected straightaway.</i></b></p> <p><b>6.4 Packing &amp; Dispatch:</b> The equipment / accessories shall be packed in a strong suitable water proof/vibration proof packing box capable of bearing air and road transit hazards.</p> <p><b>6.5 "PCRI HWR"</b> should be written in bold letters on all four sides of the box. Packing box shall be properly identified and marked with BHEL's (India) Purchase Order Number.</p> <p><b>6.6 Special Instructions:</b></p> <p><b>6.6.1)</b> Apart from customer specified vendor for each individual item, additional vendors offering items of "<b>Reputed Make</b>" are also acceptable subject to <b>customer approval</b>. The vendor should fulfill anyone of the following condition;</p> <p>a. "Vendor have supplied the item for at least one thermal power plant of 500 MW or above capacity". OR</p> <p>b. "Offered item has completed one year of commercial operation and the equipment supplied should have completed the contractual guarantee period". <b>OR</b></p> <p>c. Vendor have supplied the same equipment as required against our enquiry to any power plant.</p> <p><b>6.6.2)</b> Vendor to provide documentary evidence like PO copy, end user certificate / commissioning report etc. in support of fulfilling either of the above criteria for customer review.</p>				
हस्ताक्षर एवं दिनांक SIGN & DATE	<p>स्वत्वाधिकार एवं गोपनीय</p> <p>इस प्रलेख में दी गई सूचना भारत हेवी इलेक्ट्रिकल्स की सम्पत्ति है इसका प्रस्ताव एवं अप्रस्ताव रूप से किसी भी तरह प्रयोग, जो कि कंपनी के हित में हानिकारक हो, न किया जाए ।</p> <p>व्यक्तिगत रूप से प्रयोग हेतु इस प्रलेख में दी गई सूचना भारत हेवी इलेक्ट्रिकल्स की सम्पत्ति है इसका प्रस्ताव एवं अप्रस्ताव रूप से किसी भी तरह प्रयोग, जो कि कंपनी के हित में हानिकारक हो, न किया जाए ।</p> <p>The information on this documents is the property of Bharat Heavy Electrical Limited. It must not be used directly or indirectly in any way detrimental to the interest of the company.</p>				

दिनांक एवं हस्ताक्षर SIGN & DATE		<p style="text-align: center;"><b>उत्पाद क्रय विनिर्देश</b></p> <p style="text-align: center;"><b>PRODUCT PURCHASE SPECIFICATION</b></p>	<b>PR00015</b>			
SUPERSEDES INVENTORY NO.  शामिल सूची संख्या को			पृष्ठ	3	का	1
बहुरूपीकरण संख्या The information on this document is the property of Bharat Heavy Electrical Limited. It must not be used directly or indirectly in any way detrimental to the interest of the company.		<p><b>1.0 Name of Equipment : pH Meter (Portable)</b></p> <p><b>2.0 APPLICATION:</b> pH is a measurement of the acidity or alkalinity of a substance (generally liquid). pH Meter is required to measure pH of water and other liquid samples. pH meter with Automatic read function with easy calibration and user interface and calibration timer.</p> <p><b>3.0 General :</b> pH meter shall be microprocessor based and shall have tough construction, PORTABLE model. Meter shall be user friendly with minimal keystrokes and touch-key commands, simple to calibrate and use. Meter shall have built-in electrode holder to hold the platinum pH electrode during the transport/storage. pH Meter shall be operated on batteries.</p> <p><b>3.0 SPECIFICATIONS OF EQUIPMENT :</b></p> <p><b>3.01 Range:</b></p> <p>(i) pH : 0.0 to 14.0</p> <p>(ii) mV : ± 2000 mV</p> <p>(iii) Temperature : -10 to 110 °C (-50 to 230 °F)</p> <p><b>3.02 Resolution:</b></p> <p>(i) pH : 0.1; 0.01; 0.001 (selectable)</p> <p>(ii) mV : 0.1</p> <p>(iii) Temperature : 0.1°C</p> <p><b>3.03 Accuracy:</b></p> <p>(i) pH : ± 0.002</p> <p>(ii) mV : ± 0.2 mV or ± 0.05% (whichever is greater)</p> <p>(iii) Temperature : ± 0.3 °C at 0-70 °C; ± 1.0 °C at 70-110 °C</p> <p><b>3.04 Output</b> : One way, RS-232</p> <p><b>3.05 Inputs</b> : One BNC; One 5-pin connector, One 2 mm singlepin reference connector</p> <p><b>3.06 Input Impedance</b> : &gt; 10<sup>12</sup> Ohms</p>				
स्वत्वाधिकार एवं गोपनीय इस प्रलेख में दी गई सूचना भारत हेवी इलेक्ट्रिकल्स की संपत्ति है। इसका प्रलेख एवं अप्रलेख रूप से किसी भी तरह प्रयोग, जो कि कंपनी के हित में हानिकारक हो न किया जाए।						
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दिनांक एवं हस्ताक्षर SIGN & DATE		<b>उत्पाद क्रय विनिर्देश</b>		<b>PR00015</b>			
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सामग्री सूची संख्या को	SUPERSEDES INVENTORY NO.			Page	2	of	3
<p>बहुरूपीयता   छय- बहुरूपीयता   रू</p> <p>The information on this documents is the property of Bharat Heavy Electrical Limited. It must not be used directly or indirectly in any way detrimental to the interest of the company.</p>	<p><b>3.07 Display</b> : Custom LCD</p> <p><b>3.08 Buffer Recognition</b> : Auto; 4.01, 6.86, 7.00, 10.01</p> <p><b>3.09 Calibration Points</b> : 1, 2 or 3 (1-user previous calibration slope and adjusts offset; 2 and 3- create new slope)</p> <p><b>3.10 Calibration Review</b> : User-activated; show last calibration slope, date and time, buffer/standards used and mV in each Standard.</p> <p><b>3.11 Temperature compensation</b> : Auto or manual</p> <p><b>3.12 Slope</b> : 48-65 mV/decade</p> <p><b>3.13 Data Storage</b> : 300-point memory</p> <p><b>4.0 Standard Accessories</b> : pH meter shall be supplied along with Platinum pH electrode, power supply 230V adapter, buffers solution (4.01 &amp; 6.86, 7.00 &amp; 10.01), Electrode Filling Solution &amp; three empty beakers and a manual.</p> <p><b>5.0 Detailed printed Catalogue must be provided along with the offer submitted.</b></p> <p><b>All Consumable &amp; Necessary Accessories required for Installation &amp; Commissioning will be on Vendor Scope.</b></p>						
<p><b>स्वत्वाधिकार एवं गोपनीय</b></p> <p>इस प्रलेख में दी गई सूचना भारत हेवी इलेक्ट्रिकल्स की सम्पत्ति है इसका प्रयुक्त एवं अप्रत्यक्ष रूप से किसी भी तरह प्रयोग, जो कि कंपनी के हित में हानिकारक हो, न किया जाए ।</p>							
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सामग्री सूची संख्या को	SUPERSEDES INVENTORY NO.	<p>बदलते-बदलते   छय-बदलते-छय   इ-</p> <p>The information on this documents is the property of Bharat Heavy Electrical Limited. It must not be used directly or indirectly in any way detrimental to the interest of the company.</p>	<p><b>6.0 General Terms &amp; Conditions</b></p> <p><b>6.1 Document :</b> One hard copy of O&amp;M manual in English language giving complete technical information for operation and maintenance of the equipment shall be supplied.</p> <p><b>6.2 Installation and Commissioning :</b> The supplier shall install &amp; commission the equipments at sites. Supplier should demonstrate the performance of the Equipment and all its accessories to ensure compliance with complete specifications &amp; parameters quoted by them to the satisfaction of BHEL/end user.</p> <p><b><i>Failing to comply to the Installation and Commissioning clause, the offer will be rejected straightaway.</i></b></p> <p><b>6.3 Guarantee/ Warranty :</b> The Equipment shall be guaranteed / warranted for a period of 24 months from the date of dispatched &amp; 18 months from the date of I &amp; C whichever is earlier.</p> <p><b><i>Failing to comply to the Guarantee / Warranty clause, the offer will be rejected straightaway.</i></b></p> <p><b>6.4 Packing &amp; Dispatch:</b> The equipment / accessories shall be packed in a strong suitable water proof/vibration proof packing box capable of bearing air and road transit hazards.</p> <p><b>6.5 "PCRI HWR"</b> should be written in bold letters on all four sides of the box. Packing box shall be properly identified and marked with <b>BHEL's (India) Purchase Order Number.</b></p> <p><b>6.6 Special Instructions:</b></p> <p><b>6.6.1)</b> Apart from customer specified vendor for each individual item, additional vendors offering items of "<b>Reputed Make</b>" are also acceptable subject to <b>customer approval</b>. The vendor should fulfill anyone of the following condition;</p> <p>a. "Vendor have supplied the item for at least one thermal power plant of 500 MW or above capacity". OR</p> <p>b. "Offered item has completed one year of commercial operation and the equipment supplied should have completed the contractual guarantee period". OR</p> <p>c. Vendor have supplied the same equipment as required against our enquiry to any power plant.</p> <p><b>6.6.2)</b> Vendor to provide documentary evidence like PO copy, end user certificate / commissioning report etc. in support of fulfilling either of the above criteria for customer review.</p>
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दिनांक एवं हस्ताक्षर SIGN & DATE		<div style="border: 1px solid red; padding: 5px; text-align: center;"> <b>Annexure-IV</b>  <b>Conductivity Meter Bench Top</b> </div>	<b>PR00400</b>			
SUPERSEDES INVENTORY NO सामग्री सूची संख्या को		<b>PRODUCT PURCHASE SPECIFICATION</b>	पृष्ठ Page	3 1	का of	1 3
सामग्री सूची संख्या को The information on this documents is the property of Bharat Heavy Electrical Limited. It must not be used directly or indirectly in any way detrimental to the interest of the company.		<p><b>1.0 Name of Equipment : Conductivity Meter (Bench Top)</b></p> <p><b>2.0 APPLICATION:</b> Instrument is required to measure conductivity of water &amp; other samples in the Lab.</p> <p><b>3.0 General :</b> Conductivity meter shall be microprocessor based, water proof and shall have tough construction. Meter shall be user friendly with minimal keystrokes and touch-key commands, simple to calibrate and use. It shall measure Conductivity, TDS, Salinity and Temperature. Meter shall have built-in electrode holder to hold the electrode during the transport/storage. Meter shall have anti-glare large Liquid Crystal Display with 99-points recall memory, RS232 downloading capability..</p> <p><b>3.0 SPECIFICATIONS OF EQUIPMENT :</b></p> <p><b>3.01 Range:</b></p> <p>(i) Conductivity : 0 to 19.99 <math>\mu</math>S/cm, 20 to 199.9 <math>\mu</math>S/cm, 200 to 1999.9 <math>\mu</math>S/cm, 2 to 19.99 mS/cm, 20-199.9 mS/cm</p> <p>(ii) TDS : 0 to 50,000 mg/L as NaCl</p> <p>(iii) Salinity : 0 to 42 g/L (ppt)</p> <p>(iv) Temperature : -10 to 105° C</p> <p><b>3.02 Resolution:</b></p> <p>(i) Conductivity : 0.1 <math>\mu</math>S /cm, 1 <math>\mu</math>S/cm, 0.01 mS/cm, 0.1 mS/cm</p> <p>(ii) TDS : 0.1 mg/l, 1 mg/l, 0.01 g/l, 0.1 g/l</p> <p>(iii) Salinity : 0.1 g/l (ppt)</p> <p>(iv) Temperature : <math>\pm 0.1^{\circ}</math>C</p> <p><b>3.03 Accuracy:</b></p> <p>(i) Conductivity : <math>\pm 0.5\%</math> of the range</p> <p>(ii) TDS : <math>\pm 0.5\%</math> of full scale</p> <p>(iii) Salinity : 0.1 ppt (-2 to 35° C)</p> <p>(iv) Temperature : <math>\pm 0.3^{\circ}</math>C at 0 – 70° C, <math>\pm 1.0^{\circ}</math> C at 70 – 110° C</p>				
स्वत्वाधिकार एवं गोपनीय इस दस्तावेज में दी गई सूचना भारत हेवी इलेक्ट्रिकल्स की सम्पत्ति है इसका प्रयोग एवं आरक्षण काय से किसी भी तरह प्रयोग, जो कि कंपनी के हित में हानिकारक हो न किया जाए।						
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स्वत्वाधिकार एवं गोपनीय इस प्रलेख में दी गई सूचना भारत हेवी इलेक्ट्रिकल्स की संपत्ति है इसका प्रत्यक्ष एवं अप्रत्यक्ष रूप से किसी भी तरह प्रयोग, जो कि कंपनी के हित में हानिकारक हो न किया जाए।	The information on this documents is the property of Bharat Heavy Electrical Limited. It must not be used directly or indirectly, in any way detrimental to the interest of the company.	<p><b>3.04 Conversion Factor :</b></p> <p>(i) TDS : Adjustable automatic or user – adjustable</p> <p>(ii) Temperature : Manual (User-selected coefficient, Compensation % per °C) or Automatic</p> <p><b>3.05 Input :</b> 5-pin (with temperature), Line Power</p> <p><b>3.06 Output :</b> One way, RS-232</p> <p><b>3.07 Display :</b> Custom LCD</p> <p><b>3.08 Instrument Drift :</b> &lt;40 <math>\mu\text{V}/^\circ\text{C}</math></p> <p><b>3.09 Input Bias Current :</b> &lt;+/- picoamp at 25°C; +/- picoamp over full range</p> <p><b>3.10 Environmental :</b> 0-50 °C at 85% noncondensing requirements Relative Humidity</p> <p><b>3.09 Calibration Points :</b> 1, 2 or 3 (1-user previous calibration slope and adjusts offset; 2 and 3- create new slope)</p> <p><b>3.10 Power :</b> 6-12V DC; use either 115 or 230V, 50/ 60Hz external power supply or Customer provided supply with 50Ma output, 5.5mm power plug with a 2.5 mm center post opening</p> <p><b>3.11 Enclosure :</b> Water resistant (IP 32), Chemical Resistant</p> <p><b>4.0 Standard Accessories :</b> The instrument shall be supplied with electrode, 1-meter cable, 1000 <math>\mu\text{S}/\text{cm}</math> standard and instruction manual</p> <p><b>5.0 Detailed printed Catalogue must be provided along with the offer submitted.</b></p>			
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दिनांक एवं हस्ताक्षर SIGN & DATE		उत्पाद क्रय विनिर्देश  <b>PRODUCT PURCHASE SPECIFICATION</b>	<b>PR00400</b>			
SUPERSEDES INVENTORY NO.  समीची सूची संख्या को			पृष्ठ	3	का	3
स्वतंत्रताधिकार एवं गोपनीय  इस दस्तावेज में दी गई सूचना भारत हेवी इलेक्ट्रिकल्स की सम्पत्ति है इसका प्रत्यक्ष एवं अप्रत्यक्ष रूप से किसी भी तरह प्रयोग, जो कि कंपनी के हित में हानिकारक हो न किया जाए।	स्वतंत्रताधिकार एवं गोपनीय  The information on this documents is the property of Bharat Heavy Electrical Limited. It must not be used directly or indirectly, in any way detrimental to the interest of the company.	<p><b>6.0 General Terms &amp; Conditions</b></p> <p><b>6.1 Document :</b> One hard copy of O&amp;M manual in English language giving complete technical information for operation and maintenance of the equipment shall be supplied.</p> <p><b>6.2 Installation and Commissioning :</b> The supplier shall install &amp; commission the equipments at sites. Supplier should demonstrate the performance of the equipment and all its accessories to ensure compliance with complete specifications &amp; parameters quoted by them to the satisfaction of BHEL/end user.</p> <p><i>Failing to comply to the Installation and Commissioning clause, the offer will be rejected straightaway.</i></p> <p><b>6.3 Guarantee/ Warranty :</b> The Equipment shall be guaranteed / warranted for a period of 36 months from the date of dispatched &amp; 24 months from the date of I &amp; C whichever is earlier.</p> <p><i>Failing to comply to the Guarantee / Warranty clause, the offer will be rejected straightaway.</i></p> <p><b>6.4 Packing &amp; Dispatch:</b> The equipment / accessories shall be packed in a strong suitable water Proof / vibration proof packing box capable of bearing air and road transit hazards.</p> <p><b>6.5 "PCRI HWR"</b> should be written in bold letters on all four sides of the box. Packing box shall be properly identified and marked with BHEL's (India) Purchase Order Number.</p> <p><b>6.6 Special Instructions:</b></p> <p><b>6.6.1)</b> Apart from customer specified vendor for each individual item, additional vendors offering items of "<b>Reputed Make</b>" are also acceptable subject to <b>customer approval</b>. The vendor should fulfill anyone of the following condition;</p> <p>a. "Vendor have supplied the item for at least one thermal power plant of 500 MW or above capacity". OR</p> <p>b. "Offered item has completed one year of commercial operation and the equipment supplied should have completed the contractual guarantee period". OR</p> <p>c. Vendor have supplied the same equipment as required against our enquiry to any power plant.</p> <p><b>6.6.2)</b> Vendor to provide documentary evidence like PO copy, end user certificate / commissioning report etc. in support of fulfilling either of the above criteria for customer review.</p>	Page	3	of	3
दिनांक N & DATE						




दिनांक एवं हस्ताक्षर SIGN & DATE 	<b>Annexure-V</b> <b>Conductivity Meter Portable</b>			<b>PR00401</b>		
	<b>PRODUCT PURCHASE SPECIFICATION</b>			पृष्ठ Page	2 1	का of
SUPERSEDES INVENTORY NO सामग्री सूची संख्या को	<b>1.0 Name of Equipment : Conductivity Meter (Portable)</b>					
<b>2.0 APPLICATION:</b> Instrument is required to measure conductivity of water & other samples in the Lab						
<b>3.0 General :</b> Portable Conductivity meter shall be microprocessor based, water proof and shall have tough construction with auto range facility. Meter shall be user friendly with minimal keystrokes and touch-key commands, simple to calibrate and use. It shall measure Conductivity, Receptivity and Temperature. Meter shall have anti-glare large Liquid Crystal Display with 300-points data storage, RS232 down loading capability.						
<b>4.0 SPECIFICATIONS OF EQUIPMENT :</b>						
(a) Measuring : AC bipolar electrode						
(b) Measuring range : 0.55 $\mu$ S/cm to 2000 $\mu$ S/cm						
(c) Display : 3½ LCD						
(d) Sensor : Along with air tight flow through cell						
(e) Cable Length : 1 meter						
(f) Repeatability : $\pm$ 0.5 % freely setting (each range)						
(g) Temperature : 0-80 °C						
(h) Temperature : auto/manual for pure water Compensation						
(i) Temperature coefficient : 0-9.99% freely setting						
(j) Data storage : 300 data						
(k) Temperature calibration : one point calibration						
(l) Auto Hold Function : To be provided						
(m) Interval Function : To be provided (5 sec – 99 minute 59 sec)						
(n) Data Printing facility : To be provided						
(o) Power source : Dry battery or AC adapter						
(p) Output : RS-232C and analog						
(q) Construction : IP 67 (Water Proof)						
(r) Validation : Supporting ISO-14000/9001						
(s) Ambient Temperature : 0-40 °C						



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 इस प्रतीक में दी गई सूचना भारत हेवी इलेक्ट्रिकल्स की संपत्ति है इसका प्रयोग एवं अपर्याप्त रूप से किसी भी तरह प्रयोग, जो कि कंपनी के हित में हानिकारक हो न किया जाए।

हस्ताक्षर एवं दिनांक  
SIGN & DATE

दिनांक एवं हस्ताक्षर SIGN & DATE		<p style="text-align: center;">उत्पाद क्रय विनिर्देश</p> <p style="text-align: center;">PRODUCT PURCHASE SPECIFICATION</p>	PR00401			
सामीची सूची संख्या को	SUPERSEDES INVENTORY NO.		पृष्ठ Page	2	का of	2
<p style="text-align: center;">उत्पाद विनिर्देश</p> <p style="text-align: center;">The information on this documents is the property of Bharat Heavy Electrical Limited. It must not be used directly or indirectly in any way detrimental to the interest of the company.</p>	<p>5.0 The instrument shall be supplied with electrode, 1-meter cable, 0.55 to 1.99 mS/cm standard and instruction manual. Calibration data storable sensor shall be provided along with the Instrument.</p> <p><b>Detailed printing catalogue must be provided along with the offer submitted.</b></p> <p>6.0 <b>General Terms &amp; Conditions</b></p> <p>6.1 <b>Document</b> : One hard copy of O&amp;M manual in English language giving complete technical information for operation and maintenance of the equipment shall be supplied.</p> <p>6.2 <b>Installation and Commissioning</b> : The supplier shall install &amp; commission the equipments at sites. Supplier should demonstrate the performance of the Equipment and all its accessories to ensure compliance with complete specifications &amp; parameters quoted by them to the satisfaction of BHEL/end user.</p> <p><b>Failing to comply to the Installation and Commissioning clause, the offer will be rejected straightaway.</b></p> <p>6.3 <b>Guarantee/ Warranty</b> : The Equipment shall be guaranteed / warranted for a period of 36 months from the date of dispatched &amp; 24 months from the date of I &amp; C whichever is earlier.</p> <p><b>Failing to comply to the Guarantee / Warranty clause, the offer will be rejected straightaway.</b></p> <p>6.4 <b>Packing &amp; Dispatch</b>: The equipment / accessories shall be packed in a strong suitable water proof/vibration proof packing box capable of bearing air and road transit hazards.</p> <p>6.5 <b>"PCRI HWR"</b> should be written in bold letters on all four sides of the box. Packing box shall be properly identified and marked with BHEL's (India) Purchase Order Number.</p> <p>6.6 <b>Special Instructions:</b></p> <p>6.6.1) Apart from customer specified vendor for each individual item, additional vendors offering items of <b>"Reputed Make"</b> are also acceptable subject to <b>customer approval</b>. The vendor should fulfill anyone of the following condition;</p> <p>a. "Vendor have supplied the item for at least one thermal power plant of 500 MW or above capacity". OR</p> <p>b. "Offered item has completed one year of commercial operation and the equipment supplied should have completed the contractual guarantee period". OR</p> <p>c. Vendor have supplied the same equipment as required against our enquiry to any power plant.</p> <p>6.6.2) Vendor to provide documentary evidence like PO copy, end user certificate / commissioning report etc. in support of fulfilling either of the above criteria for customer review.</p>					
स्वत्वाधिकार एवं गोपनीय	<p>इस प्रदेख में दी गई सूचना भारत हेवी इलेक्ट्रिकल्स की सम्पत्ति है इसका प्रयुक्त एवं आरक्षण रूप से किसी भी तरह प्रयोग, जो कि कंपनी के हित में हानिकारक हो न किया जाए।</p>					
हस्ताक्षर एवं दिनांक SIGN & DATE						



## उत्पाद क्रय विनिर्देश

पृष्ठ 2 का 1

### PRODUCT PURCHASE SPECIFICATION

Page 1 of 2

सामग्री सूची सखिया को अधिकृतित करता है

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इस प्रलेख में दी गयी सूचना भारत हेतु इलेक्ट्रिकल्स की संपत्ति है इसका प्रत्यक्ष एवं अप्रत्यक्ष रूप से किसी भी तरह प्रयोग, जो कि कम्पनी के हित में हानिकारक हो स किचा जाये।

हस्ताक्षर एवं दिनांक  
SIGN & DATE

## WATER QUALITY CHECKER

### 1. General.

Portable Water Quality Checker to measure pH, conductivity, Dissolved Oxygen, Turbidity, salinity and temperature simultaneously in various depths.

### 2. Technical Specifications.

**2.1 Measuring parameters:** pH, Conductivity, D.O., Turbidity, Salinity and Temperature.

#### 2.2 Measuring Method :

- |       |                       |   |                      |
|-------|-----------------------|---|----------------------|
| (i)   | pH                    | : | Glass electrode      |
| (ii)  | Conductivity          | : | AC 4 electrodes      |
| (iii) | Dissolved Oxygen (DO) | : | Galvanic Cell        |
| (iv)  | Turbidity             | : | 90° scattering light |
| (v)   | Salinity              | : | AC 4 electrodes      |
| (vi)  | Temperature           | : | Platinum RTD         |


#### 2.3 Measuring Range :

(i)	pH	:	0 - 14
(ii)	Conductivity	:	0-7 S/m (High), 0-200 m S/m (Low)
(iii)	Dissolved Oxygen (DO)	:	0-20 mg/L
(iv)	Turbidity	:	0-800 NTU
(v)	Salinity	:	0-4 %
(vi)	Temperature	:	0-50 °C
(vii)	Resolution	:	0.01 in FS
(viii)	Repeatability	:	± 0.1 in FS
(ix)	Temp. Comp. Range	:	0-50 °C
(x)	Calibration	:	Auto
(xi)	Display	:	LCD
(xii)	Power source	:	Dry battery or AC adopter
(xiii)	Sensors	:	Solid type with all sensors built in one unit which can be used up to 30 mtrs. Depth.

### 3. Accessories:

Any accessories/consumables required for installation, commissioning and operation of equipment will be included in supply scope.

Detailed printed Catalogue must be provided with the offer.

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		<h3>PRODUCT PURCHASE SPECIFICATION</h3>	पृष्ठ Page	2 2	का of	2 2
SUPERSEDES INVENTORY NO.	<p><b>4. General Terms &amp; Conditions :</b></p> <p><b>4.1. Document:</b> One hard copy of O&amp;M manual in English language giving complete technical information for operation and maintenance of the equipment shall be supplied with the equipment.</p> <p><b>4.2. Installation and Commissioning:</b> The supplier shall Install &amp; Commission the equipment at required sites. Supplier should demonstrate the performance of the equipment and all its accessories to ensure compliance with complete specifications &amp; parameters quoted by them to the satisfaction of BHEL / end user.</p> <p style="text-align: center;"><i>Failing to comply to the Installation and Commissioning clause, the offer will be rejected straightaway.</i></p> <p><b>4.3 Guarantee / Warranty:</b> The equipment shall be guaranteed / warranted for satisfactory performance for a period of 24 months from the date of installation &amp; commissioning or 36 months from the date of dispatch, whichever is earlier.</p> <p style="text-align: center;"><i>Failing to comply to the Guarantee / Warranty clause, the offer will be rejected straightaway.</i></p> <p><b>4.4 Packing &amp; Dispatch:</b> The equipment / accessories shall be packed in a suitable water proof / vibration proof packing boxes capable of bearing air and road transit hazards.</p> <p><b>4.5 "PCRI HWR"</b> should be written in bold letters on all four sides of the box. Packing box shall be properly identified and marked with BHEL's (India) Purchase Order Number.</p> <p><b>4.6 Special Instructions:</b></p> <p><b>4.6.1</b> Apart from customer specified vendor for each individual item, additional vendors offering items of "Reputed Make" are also acceptable subject to customer approval. The vendor should fulfill anyone of the following condition;</p> <p>a. "Vendor have supplied the item for at least one thermal power plant of 500 MW or above capacity". OR</p> <p>b. "Offered item has completed one year of commercial operation and the equipment supplied should have completed the contractual guarantee period". OR</p> <p>c. Vendor have supplied the same equipment as required against our enquiry to any power plant.</p> <p><b>4.6.2</b> Vendor to provide documentary evidence like PO copy, end user certificate / commissioning report etc. in support of fulfilling either of the above criteria for customer review.</p>					
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हस्ताक्षर एवं दिना SIGN & DATE						

