



BHARAT HEAVY ELECTRICALS LIMITED

(A Government of India Undertaking)
HIGH PRESSURE BOILER PLANT
PURCHASE DEPARTMENT - FOSSIL BOILERS
THIRUCHIRAPALLI - 620014
TAMILNADU (INDIA)

PHONE :0431-2577152
GRAMS : BHARATELEC
FAX NO: 0431-2520193
E-mail: ssraj@bheltry.co.in
Web:

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Enquiry No	Enquiry Date	Due Date for Quotation
2811700002 - R&D	10.03.2017	22.04.2017
Please quote Enquiry No, Date and due date in all correspondences. This is only a request for quotation and not an order. Bid should be submitted in two parts. 1.Techno-commercial bid (Part-I) and 2.Price bid(Part-II) in a separate sealed cover and both covers must be placed in a third cover and sealed. Our Enquiry No., Enq. date & Enq. Due date must be written on all three covers.		

Item	Description	Unit	Quantity	Delivery Quantity	Schedule Date
10	Portable Data Logger as per the enclosed specification	NO	1.000	1.00	20.07.17

General Note:

NOTE :

- 1)Offer will be invited in TWO PART BID only
(Technical bid and Price bid - Two separate covers- "TECHNICAL BID" Cover and "PRICE BID" Cover).
- 2) If regretted make mention on the top of the reply cover as "REGRETTED".
- 3)LD Clause for delivery has to be confirmed without fail. Otherwise we would assume that you have accepted our LD Clause.
- 4)BHEL preferred payment term is "100% direct Payment after 45 days from the date of receipt and acceptance of the material".This payment term acceptance is essential for consideration of your offer. Offer with advance payment or proforma invoice will not be considered.
- 5)Transport and Delivery at BHEL - shall be Vendor's scope.
- 6)Tender details are also hosted in BHEL Web : www.bhel.com.
- 7)No Revision of prices will be entertained after the tenders are opened.
- 8)Offer validity should be minimum 90 days from the date of opening, otherwise we are not in a position to consider your offer.
- 9)Kindly submit point wise compliance to our Terms & Condition. Otherwise it will presumed that you are accepting BHEL's terms and conditions.
- 10)Test certificate and Guarantee certificate is to be submitted by supplier.

The offers should reach us 30 minutes before the time of opening of tenders. The offers will be opened at 14.30 hrs on the due date of tender in the presence of tenderers who have submitted their offer and who may like to be present for the tender opening.Late and delayed offers are liable to be rejected.

Yours faithfully,
For BHARAT HEAVY ELECTRICALS LIMITED

S. SUBBURAJ
Senior Manager
Purchase / R&D and CR
Bharat Heavy Electricals Limited
Thiruchirappalli - 620 014


MANAGER / PURCHASE
(FOSSIL BOILERS)
Yours faithfully,



429-002/A

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2811700002 / 10.03.2017

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11)Qualifying criteria format is enclosed. Copy of filled and signed Qualifying criteria format is to be submitted. Without this offer will not be considered.

12)Technical specification is enclosed. Copy of filled and signed technical specification confirmations is to be submitted. Without this offer will not be considered.

13) Since R and D dept. of BHEL is registered with Govt of India in the department of scientific and industrial research for availing excise duty exemption, confirm to supply PORTABLE DATA LOGGER without paying excise duty.(Excise duty exemption certificate will be provided by BHEL prior to despatch)

14)Since the quantity is less, special provision for MSE is not applicable.

The bidder along with its associate/ collaborators/ sub-contractors/ sub-vendors/ consultants/ service providers shall strictly adhere to BHEL fraud prevention policy displayed on BHEL website <http://www.bhel.com> and shall immediately bring to the notice of BHEL management about any fraud or suspected fraud as soon as it comes to their notice.

The supplier shall submit EI/EII forms to BHEL time to time as indicated by the BHEL and in case of inordinate delay in issuing EI/EII forms, then BHEL reserves the right to deduct 5% of the value of the supplied items against which EI/EII forms pending to be issued

Enclosures:

"LD clause has to be confirmed without fail."

**OFFER IS TO BE SENT TO THE
FOLLOWING ADDRESS**

**AGM / CCDP
Purchase / R&D and CR
CCDP, BHEL
TIRUCHIRAPALLI - 620 014
TAMIL NADU, INDIA**

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For **BHARAT HEAVY ELECTRICALS LIMITED**

S. SUBBURAJ
Senior Manager
Purchase / R&D and CR
Bharat Heavy Electricals Limited
Tiruchirappalli - 620 014


MANAGER / PURCHASE
(FOSSIL BOILERS)
Yours faithfully,

**Research and Development
Bharat Heavy Electricals Limited**

Ref: QC: NSE: 16-17: 02

08/03/2017

QUALIFYING CRITERIA

The BIDDER / VENDOR have to necessarily provide the following details, for making an assessment of the firm's capability and competency.

BHEL will study both the Qualifying Criteria and Response for Technical Specifications. The Price bid can be studied only if both the Qualifying Criteria and Response for Technical Specifications are found acceptable otherwise rejected.

The BIDDER is expected to give complete details against each clause in the table given below and wherever necessary an additional sheet may be attached giving clear reference number to cover the required details.

Name of the product: "Portable Data Logger". Refer Technical Specification for further details. .

S. No.	PARTICULARS	VENDOR's RESPONSE
1	The BIDDER / VENDOR shall have a minimum of Five Years of Continuous Experience in the Design, Manufacture & Supply of " Portable Data Logger ". Please indicate the actual experience.	
2	Number of " Portable Data Logger " supplied till date in India. Please furnish contact person name, address, phone number, fax number and mail id.	
3	Number of " Portable Data Logger " supplied till date outside India. Please furnish contact person name, address, phone number, fax number and mail id.	
4	Details of Design Set-Up and Technology Back-Up assured from the PRINCIPAL Equipment Maker.	
5	Details on Service-after-Sales set-up in India including the addresses of Agents/Service Centre in India.	
6	BHEL reserves the right to verify the information provided by the vendor for the referred Portable Data Logger supplied. BHEL reserves the right to accept or reject the offer based on the assessment of technical and financial capability of vendor.	Accepted

Prepared	Reviewed	Approved
(P.Selvaraj)	(M.Anandaraj)	(R.Kaliappan)

**Research & Development
Bharat Heavy Electricals Limited**

Technical specifications for Portable Data Acquisition System

Ref: TS: BHEL: R&D: NSE: 16-17:10

04/02/2017

Scope of Vendor: Supply of Portable Data Acquisition System

Vendor is requested to give specific confirmation for each point given below. Deviations if any shall be clearly indicated.

Sl. No	Particulars	BHEL specifications	Vendor's Confirmation	Deviation, if any
1	Measurements	- DC Volts up to 300V with 100nV resolution and 0.004% basic DC V accuracy 6 1/2 Digits with 22 bit resolution - AC/DC Current up to 1A. - Input Impedance > 10 Giga Ohm in 100mV, 1V & 10V range - AC Volts True RMS up to 300V with 300 KHz BW 2 & 4 Wire Resistance Measurement 100 Ohms to 100 MOhms - Frequency & Period up to 300 KHz - Temperature Measurement with RTD, Thermistor Thermocouple (B,E,J,K,N,R,S,T) - DC & AC Current 4mA to 1A directly. - Should have VFD Display with LAN, LXI compliance control and monitor thru PC & USB PC Interfaces in addition to Ext Trigger I/P & Alarm O/P. - Calibration certificates traceable to National / International standards.		
2	System Characteristics	- The LXI Compliant 180 Channel Data Acquisition System should be a modular system to record parameters like Voltage, Current, Temperature, Pressure, Differential Pressure and Velocity. - The system should be configurable as a Data Logger, Data Acquisition System and High Performance Switching Unit. - It should be capable of working Stand Alone or be controlled from a Controller.		

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Bharat Heavy Electricals Limited

		4. The system should have internal non-volatile memory storage facility for 50,000 data with time stamp as well as external USB pen drive facility. 5. System Speed - >100rdgs/sec 6. Scanning Inputs - Analog & Digital 7. Scan Triggering - Int, Ext, Manual, Software, on Ch Alarm 8. Scan Count - 1 to 50,000 or continuous 9. Scan Interval - 0 to 99 hours, 1ms step size 10. Alarms - Hi, Lo with 4 TTL Compatible Alarm Outputs 11. Memory - 50,000 with time stamp & real time clock 12. Maths - Scaling (Mx + B) & Min/Max/Avg 13. Relay Maintenance - Should count each relay closure 14. Should come with powerful plug & play Logger S/W.		
3	Module Characteristics	1. No. of Temperature cum Voltage Channels: 180 2. No. of Current Channels: 18 3. 5 Amp Shunt – 5 Nos. 4. Scan Speed : 60Ch/sec 5. Offset Voltage : <3μV 6. Bandwidth : 10MHz 7. Temperature Measurement with RTD, Thermistor Thermocouple (B,E,J,K,N,R,S,T) 8. Max Input : 300VAC/DC 9. AC/DC Current Channels up to 1A with Fuse Protection 10. Configuration : 2 wire or 4 wire - user selectable		
4	Personnel Computer (PC) and Software	BHEL will provide general PC hardware and PC software, then bidder should include only the application software in their scope. The vendor should give detailed Hardware and Software specification for arranging at BHEL, Trichy and supply the following. 1. It must be supplied with suitable device drivers for industry software like Visual Engineering Environment (VEE) and Lab view.		

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Bharat Heavy Electricals Limited

		2. The Data Acquisition System should be robust and portable as mentioned above. 3. Application software CDs 1 set with valid license. 4. Responsibilities of interfacing BHEL supply PC with Basic Equipment (including interconnecting cables). 5. Installation & Maintenance manuals (2 Hard copies & 1 set of CDs). 6. Mandatory spares and Consumables.		
5	Inspection at Vendor's works	Onsite Inspection: visual inspection & showing practical operation/demonstration of the equipment as per specification at customer site. The vendor should once again thoroughly inspect the equipment, furnish inspection certificate for BHEL, Trichy review and get clearance prior to dispatch of Equipment.		
6	Performance Prove-Out at BHEL, Trichy.	The Supplier's Service Engineer shall install/commission and conduct demonstration of the Portable Data Acquisition System at BHEL, Trichy.		
7	Training on Operation & Maintenance at BHEL, Trichy.	Complete Training for BHEL, Trichy Engineers to be given on Operation & Maintenance of the offered equipment at BHEL, Trichy. The vendor should give complete training for 2 persons may be applicable at BHEL, Trichy.		
8	Onsite Performance Guarantee	The Portable Data Acquisition System is to be guaranteed for its performance for a minimum period of two years from the date of performance acceptance at BHEL, Trichy.		
9	Installation and O&M manual in ENGLISH Language	2 Nos Installation, Operation & Maintenance Manual. It shall contain Electric Schematics, Circuit Diagrams, PCB Drawings, Trouble Shooting Charts, Rating of Bought-Out Items, etc. In addition, one soft copy in CD is to be supplied.		



Bharat Heavy Electricals Limited
Purchase Department / R&D and CR
CCDP, Tiruchirappalli – 620 014
Tamil Nadu, India

COMMERCIAL TERMS AND CONDITIONS FOR SUBMISSION OF OFFER

1.0 QUOTATIONS

Bidders shall submit the offer in **TWO INNER ENVELOPS** as indicated below which shall be sealed in one outer envelope.

Envelope I This sealed envelope should contain all the copies of technical bid together with un-priced commercial bid. This envelope should be clearly marked "**Part I – Technical and Commercial bid**", indicating enquiry no., due date and address & reference of the bidder.

Envelope II This sealed envelope should contain price details. This envelope should be clearly marked "**Part II – Price bid**", indicating enquiry no., due date and address & reference of the bidder.

Both the envelopes (part I & part II) shall be put in one cover, duly sealed, super scribing as part I and part II of enquiry no., due date of opening and the address and reference of the bidder.

The above offer should reach this office on or before the due date by 14.00 hrs (IST). Late offers will not be considered. We suggest you to send the offer by SPPED POST.

Tender should not be addressed any individual's name but only by designation to:

**AGM / CCDP
Purchase Department / R&D and CR
Combined Cycle Demonstration Plant
BHARAT HEAVY ELECTRICALS LIMITED
TIRUCHIRAPLLI – 620 014
TAMIL NADU, INDIA**

Tender should be free from **CORRECTION AND ERASURES**, Corrections if any, must be attested. The following guidelines are applicable for price bid

- a) If, in the price structure quoted for the required material, there is discrepancy between the unit price and the total price (total price is obtained by multiplying the unit price by the quantity), the unit price shall prevail and the total price corrected accordingly, unless in the opinion of the purchaser there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price corrected accordingly
- b) If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected
- c) If there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject of (a) and (b) above

- d) If there is such discrepancy in an offer, the same shall be conveyed to the bidder with target date upto which the bidder has to send his acceptance on the above lines and if the bidder does not agree to the decision of the purchaser, the bid is liable to be ignored.

Offers should be in **ENGLISH** and accompanied by detailed technical literature, catalogue and details of process facility in **ENGLISH**.

2.0 PART I (TECHNICAL & UNPRICED COMMERCIAL BID)

2.1 Technical

This part shall include / indicate the following:

Offer should contain complete scope of supply with all technical details, specification, delivery and other commercial terms and conditions.

2.2 Commercial

This part shall include / indicate the following;

2.2.1 Part of shipment / station of dispatch

2.2.2 Terms of payment

2.2.3 Taxes & duties applicable

2.2.4 Delivery schedule

2.2.5 Offer validity

2.2.6 Country of origin

2.2.7 A copy of "Un-Priced Part II" i.e., a copy of the price bid without **the price details** to be enclosed.

3.0 PART II (PRICE – BID)

This part should contain the schedule of price particulars and to be co – related to the technical details provided in part wherever required / possible break up price details are to be furnished. (Bidders shall quote only fixed rate / price only and not subject to any escalation whatsoever during the period of bid validity and execution of purchase order. Any bid with adjustable or price variation clause shall be treated as "non-responsive" and liable for rejection).

4.0 OPENING OF TENDERS

The part I – Technical & commercial bid alone would be opened on the tender opening date at the pre-fixed time in presence of responded tenderers / authorized representative, who may like to be present for tender opening.

The part II – Price bid of technically suitable bidders alone would be opened. The technically suitable bidders would be informed about the price bid opening date. Clarifications if any required by BHEL for technical evaluation would be sought from bidders before opening of part II – price bid.

5.0 GENERAL

5.1 Incomplete offers will not be considered.

5.2 Terms of Delivery: Bidders are required to quote their best delivery period. Delivery shall be counted from the date of letter of intent.

5.3 Taxes and Duties: All taxes and duties if any payable extra over and above the quoted price should be specifically indicated in the un-priced bid along with CST & TIN No etc., failing which the purchaser will not be liable for payment of such taxes and duties. (the quoted rates shall be considered as "all inclusive")

5.4 validity of offer: Offer shall be kept valid for acceptance for a period of 90 days (ninety days) from the date of bid opening.

5.5 Payment terms: Payment term is 100% direct payment after 45 days from the date of receipt and acceptance of materials (Any deviation in the above payment term will attract loading as mentioned below) "Base rate of SBI (as applicable on the date of Techno-commercial bid opening + 6% will be loaded for the period of relaxation sought by bidders).

Payment through bank is not preferred. In case of payment through bank is opted by the supplier, BHEL prefers documents submission through bank with copy of LR and door delivery of Goods to stores with consignee copy attached. In this case loading will be 3% on the offered value.

5.6 Liquidated Damages: It is clearly understood among the parties to the contract the **"Time is the essence of the contract"**. Therefore, the delivery of the goods specified in the purchase order should be made within the time prescribed. Failure to dispatch the materials in the time as per the delivery quoted in our purchase order would make the supplier liable to an un-conditional penalty as below.

a. Liquidated damages shall be 0.5% of the total order value per week or part there of subject to a maximum of 10% of the total order value

b. For staggered delivery schedule, LD shall be 0.5% of the undelivered portion per week of the delay or part there of subject to a maximum of 10% of the total order value.

c. Any deviation from the above LD clause, loading will be applied to the extent to which it is not agreed by the bidder (at offered value)

5.7 Risk Purchase: Alternately the purchaser at his option will be entitled to terminate the contract and to purchase elsewhere at the risk and cost of the seller either the whole of the goods or any part which the supplier has failed to deliver or dispatch within the time stipulated as aforesaid or if the same were not available, the best and the nearest available substitute therefore. The supplier shall be liable for any loss, which the purchaser may sustain by reason of such risk purchases.

5.8 Test Certificates: The bidders shall clearly mention in their offer that test certificate as called for in the technical specification, in the required number of copies will be provided at no extra cost.

5.9 Evaluation of the offers shall be on the basis of "to-Door cost at BHEL, Trichy" (Net cash outflow to BHEL). BHEL will consider the ranking after the loading is applied as offered above wherever deviations are observed.



BHARAT HEAVY ELECTRICALS LIMITED

Tiruchirapalli - 620 014

Purchase / R&D and CR

Enquiry No:

date :

COMMERCIAL TERMS CONFIRMATION

Sl No	Description	BHEL Requirement	Supplier Confirmation
01	OFFER VALIDITY	90 days from the date of tender opening	YES
02	PRICE QUOTED	FOR Destination, BHEL Stores	YES / NO
03	PACKING & FORWARDING (Inclusive or extra. If extra clearly mention in % or lumpsum amount)	Supplier Option	Included / Extra
			% / Rs
04	EXCISE DUTY	R&D department of BHEL is exempted from paying ED. (ED Exemption certificate will be provided).	Accepted
05	VAT or CST (clearly mention in %)	Supplier Option	VAT %
			CST % (without C form)
06	FREIGHT & INSURANCE (Inclusive or extra. If extra clearly mention in % or lumpsum amount)	Supplier Option	Included / Extra
			% / Rs
07	DELIVERY SCHEDULE	Supplier Option	
08	PAYMENT TERM	100% direct payment after 45 days from the receipt and acceptance of materials at BHEL, Trichy	Accepted
09	LD CLAUSE	0.5% per week to a maximum of 10%	Accepted
10	GUARANTEE / TEST CERTIFICATE	Supplier Option	
11	MSME CERTIFICATE	To be attached (if available)	
12	CONTACT PERSON DETAILS	Name	
		Mobile Number	
		Email id	

Date :

Signature of Supplier with Seal