



An ISO 9001
Company

Bharat Heavy Electricals Limited

(High Pressure Boiler Plant)

Tiruchirapalli – 620014, TAMIL NADU, INDIA

CAPITAL EQUIPMENT / MATERIALS MANAGEMENT

ENQUIRY

NOTICE INVITING TENDER

Phone: +91 431 257 76 53

Email : skaruna@bheltry.co.in

spsy@bheltry.co.in

Web : www.bhel.com

TWO PART BID

Tender to be submitted in two Parts

Enquiry
Number:

2631700029

Enquiry
Date:

06.09.2017

Due date for submission
of quotation:

27.09.2017

You are requested to quote the Enquiry number date and due date in all your correspondence. This is only a request for quotation and not an order.

Please note that under any circumstances both delayed offer and late offers will not be considered. Hence vendors are requested to ensure that the offer should reach physically on or before 14.00 Hrs(IST) on the Date of tender opening. Tenders received after 14.00Hrs (IST) will not be considered for evaluation.

Item	Description	Quantity	(Indigenous Vendors) Matl. Will be Delivered to
10	Digital Storage Oscilloscope 4 Channel 200Mhz as per the technical specification & commercial conditions applicable (To be downloaded from web site www.bhel.com or http://tenders.gov.in)	2.00 Nos.	FOR, BHEL, Stores, High Pressure Boiler Plant, Trichirappali - 620014

Important points to be taken care during submission of offer

- 1) Material shall be delivered to (By Indigenous vendors): As stated above.
- 2) By Foreign Vendors: CFR Chennai Seaport / Airport
- 3) Delivery required 3 months from the date of purchase order.
- 4) Erection & Commissioning period required 2 Weeks from the date of intimation by BHEL to vendor for deputation of their Engineers for E&C.
- 5) EMD for this Tender will be (INR): NIL
- 6) Compliance Forms. TRY/IMP/04 & TRY/IND/04A to be filled and enclosed along with the offer failing which, the offer will not be considered for evaluation.
- 7) All updates, amendments, corrigenda, etc., (if any), for each tender will be posted only on the above websites from time to time, as and when required, until each tender is opened. There will be no publication of such updates, amendments, corrigenda, etc., through newspapers or any other media.

BHEL's General guidelines / instructions (refer MM / CE / GENL / GENL / 001 - EMD) including bank guarantee formats and list of consortium banks, commercial terms check-list can be downloaded from BHEL web site <http://www.bhel.com> or from the Government tender website <http://tenders.gov.in> (public sector units > Bharat Heavy Electricals Limited page) under Enquiry reference .

Tenders should be submitted before 14.00Hrs (IST) on the due date
Tenders will be opened online at 14:30 hours on the due date
Tenders would be opened in presence of the tenderers who have submitted their offers and who may like to be present.

Yours faithfully,
For BHARAT HEAVY ELECTRICALS LIMITED

for

DGM / Capital Equipment / MM

S. PARTHASARATHY
MANAGER
CAPITAL EQUIPMENT / MM
BHEL, TRICHY-620014

PART - A
QUALIFYING CRITERIA FOR
DIGITAL STORAGE OSCILLOSCOPE, 4 CHANNEL 200 MHZ

S.No	BHEL Specification	Vendor's Offer
1.0	QUALIFYING CRITERIA	
1.1	The BIDDER / VENDOR shall be OEM or an authorised dealer for Digital Storage Oscilloscope. In case of authoriser dealers, vendor shall submit a valid authorization certificate/letter from the OEM.	
1.2	Vendor shall quote only active models in the market. Year of launch of the model quoted in this enquiry shall be indicated. Vendor/OEM should ensure spares and service support for the supplied model for a minimum period of 10 years from date of supply.	
1.3	Vendor should furnish at least one PO copy for supply of Digital Storage Oscilloscope in the last 5 years, mentioning the complete details like Name, postal address, contact person phone number & email address of the customer/ company.	
1.4	BHEL reserves the right to verify the information provided by the Vendor. In case the information provided by vendor is found to be false/incorrect, the offer shall be rejected.	

Digital Storage Oscilloscope Part B			
Sl. No.	Specification	Details	Vendor's Offer. Deviations, if any.
1.0	Analog Channels	4 (minimum)	
2.0	Bandwidth	200 Mhz across all channels or better	
3.0	Max. Sample Rate	2 GSa/s per channel (real-time) or higher	
4.0	Max. Memory Depth	4 Mpts or more	
5.0	Max. Waveform Update Rate	Minimum 230,000 waveforms per second	
6.0	Display	Hi-Def 9" or higher	
7.0	Display Resolution	Vendor to specify	
8.0	Serial Protocols	UART, USB. Vendor to specify others, if any	
9.0	Connectivity	USB, LAN. Vendor to specify others, if any	
10.0	Input Coupling	AC, DC	
11.0	Input Sensitivity Range	Vendor to specify	
12.0	Max. Input Voltage	Vendor to specify	
13.0	Display Modes	Normal, Roll	
14.0	Trigger Modes	Normal, Auto, Single	
15.0	Trigger Sensitivity	Vendor to specify	
16.0	Automatic Measurements		
16.1		Voltage - P2P, max, min, amplitude, average, top, overshoot, AC/DC RMS	
16.2		Time - period, freq, counter, duty cycle, rise time, fall time, max-min times	
16.3		Count - positive/negative pulse, rising/falling edge	
17.0	Integrated Waveform Generator	Sine, Square-wave/Pulse, Ramp/Triangle-wave, Pulse, DC offset. Vendor to specify others, if any. Vendor to provide frequency range, amplitude, duty cycle, resolution, pulse width ranges for each waveforms. (Frequency range - up to at least 10 Mhz)	
18.0	Waveform Math	Add, subtract, multiply, FFT, integrate, square-root, absolute, natural log, exponential, LP/HP filter. Vendor to specify others, if any.	
19.0	Probes	Standard probes for 4 channels (10:1) to be provided. In addition, 100:1 probes for all 4 channels also to be provided. Vendor to provide details.	
20.0	Power Consumption	Vendor to specify	
21.0	Electromagnetic Compatibility	IEC 61326 or equivalent	
22.0	Environmental Characteristics	Vibration, Shock resistance as per IEC 60068 or equivalent	
23.0	Dimensions	Vendor to specify	
24.0	Isolation Transformer	In-built. Details to be provided.	
25.0	Weight	Vendor to specify	
26.0	Type	Benchtop	
27.0	Carrying Case	Soft carrying case for safe storage/movement of the scope to be provided.	
28.0	Storage	Internal Memory & Built-in-Front Panel USB Flash Memory Port	
28.1		Internal memory storage size - vendor to specify	
28.2		Save formats - vendor to specify	
28.3		Memory sticks of 8GB minimum capacity - 2 nos. to be provided	
29.0	Software and Data Retrieval	All requisite softwares compatible to 64-bit Windows to be provided. Valid licenses to be provided for all applicable software. Softwares should be supplied standard and should support downloading data to a PC for Post Analysis.	
30.0	Upgradation	Bandwidth and license upgradation facility to digital channels also to be provided for future requirements.	

31.0	Warranty	3 years for equipment and all accessories. Vendor to confirm	
32.0	Documentation	Product Catalogue and CD-ROM with user's guide, service guide, manuals to be provided.	
33.0	Input Power	230V $\pm$ 5%, 50Hz operation	
34.0	Makes	Keysight, Tektronix, Yokogawa, Fluke, Hioki, Rohde & Schwarz, Texas Instruments, Rigol or other equivalent makes acceptable to BHEL.	
35.0	Commissioning	Detailed product demonstration to be carried at site after supply.	