College of Engineering Trivandrum, Thiruvananthapuram

NOTICE INVITING RE-TENDER

P3/5942/23/CET 30.11.2023

Tender No.	**: 34/P3/2023/EE**
E Tender ID	: 2023_DTE_611364_1
Superscription	:Purchase of Equipments for Power Electronics Lab in the Electrical and Electronics Engineering Department of this institution
Last date and time of receipt of tender on the website (www.etenders.kerala.gov.in)	:15/12/2023 3 p.m.
Date and time of opening of tender	: 18/12/2023 11 a.m.
Date up to which the rates are to be firm	:18/06/2024
Tender Cost	: Rs.2006/-(Rs1700+18% GST)
EMD required	: Rs.8054/-
Address of the Officer to whom hard copy is to be send.	: THE PRINCIPAL, COLLEGE OF ENGINEERING TRIVANDRUM, THIRUVANANTHAPURAM-695016, KERALA

Specifications are attached as Annexure

General conditions

1. The price quoted should be inclusive of all taxes, freight charges, transportation, loading, unloading charges, installation and commissioning charges and should be furnished unambiguously.
2. tax applicable is 5% as the items are purchased for research purpose. Tax exemption certificate will be provided.
3. Software should be modifiable and needs free up-gradation for 3 years and have annual maintenance contrat for 2 years after the warranty period,as per Govt.orders.The supplier should be able to make minor modifications as per the inputs from the end user during this period.
4. Payment: 100 % after successful supply, installation, and training for two days.
5. Hardware compatibility requirements and certifications (Datasheets) and software capability mentioned in the specification should be demonstrated during the technical evaluation. failing to do so will result in disqualification.
6. The item should have a minimum warranty of 3 years
7. Local(Kerala) service centres/agents should be available.
8. Delivery Period: Maximum Delivery period will be 60 days from the date of receipt of supply order.
9. The item should be supplied at P.G Hydraulics Lab of Civil Engineering Department of this institution
10. Agreement as per NIT 2 in Rs.220/- Kerala Stamp Paper and tender form should be uploaded. .
11. Date of opening of tender : In case the proposed date declared as holiday, the tender will be opened on the next working day.
12. Only GST registered firms can participate in the Tender
13. After E-Tendering the hard copy of documents should be submitted before the opening date.

NB: The Tender procedure will be made as per Rules mentioned in the Revised Store

Purchase Manual.

The bidders should participate this tender through E-Tendering System. Tender cost and EMD should be submitted only through online. For more details Contact Ph.0471 2577088, 0471 2577188, 0471 257388, 0471 2515760.

Sd/-
PRINCIPAL

Approval Valid

Digitally Approved By
Savier JS
Date: 01.12.2023
Reason: Approved

Specifications

Sl. No.	Item with detailed specification	Qty.
1	**Inverter Stacks,** 10 kVA,750 V DC bus, Four-legged IGBT switches mounted on air-cooled heat-sinks with gate drive and protection cards, Interface for standard TTL controllers, Current sensors for each phase, Voltage sensors for DC bus and lines.	2
2	**Soldering Station:** Power: 90 Watts; Temperature Range : 100°C ~ 500°C; Sleep Time (minutes) : 0~99 (adjustable); Temperature Stability : ± 2% of final value; Tip to Ground Potential : < 2 mV; Tip to Ground Resistance : < 2 ohms.; ESD Safe Main Power & Control Unit, ESD Safe lightweight Soldering Pencil fitted with 200G-2.4D Chisel 2.4mm Soldering Tip, Replaceable solder tips (at least 4 different tips to be supplied). Combined Dry & Wet Tip Cleaner Support Rack, Holder and cleaning sponge.	5
3	**Desoldering pump**	3
4	**Single Phase Autotransformer:** Input 0-240V,output 0-270V, 5kVA.	2
5	**Three Phase Autotransformer:** Input 0-440Voutput 0-470V, 15kVA. 50/60Hz, Insulation: Class "H", Core Material: CRGO	2
6	**DSO Probes** Attenuation:1:100 Input Resistance: 100MΩ Input Capacitance: 14.5pF - 17.5pF Compensation Range: 15pF -35pF System Bandwidth: DC 120MHz Maximum Working Input Voltage: X100: <2.5KVDC+Peak AC	20
7	**High-voltage Differential Probes -** Bandwidth: 25 MHz Bandwidth (—3 dB)≥ ≥ 25 MHz Rise time (calculated)≤ 14 ns Attenuation 10:1/100:1 Input R//C (each input to ground):4 Mohm /10 pF Input R//C (between inputs): 8 Mohm // 8 pF Max differential operating voltage (DC+PeakAC or RMS): ± 700 V at 100:1, ± 70 V at 10:1 Max common mode operating voltage (DC+PeakAC or RMS):± 700 V at 100:1, ± 70 V at 10:1 Compatible to 1 Mohms BNC Interface 2 each alligator clips, 2 each hook clips, USB power cord (2 m), 4 AA batteries, Manual.	1
8	Current Probe, AC/DC – 100 kHz, 50 mA to 100 A peak	1
9	**DSP Development Kit:** TMS320F28377 CPU 200MHz 32-bit Floating point launchpad (Power electronics and Motor control optimized) IEEE 754 Single PrecisionFPU	3

10	**FPGA Development Board :** FPGA Chip: Xilinx's XC3S250E FPGA; I/O support 1.2V, 2.5V, or 3.3V; 4M SPI Flash; Expansion header: 48 bidirectional I/O lines; Clock system: On-board 32MHz clock oscillator; **USB**: Two channel USB connection for JTAG and serial communications implemented with FT2232D; EEPROM memory to store configuration settings for FT2232 USB chip.; **Power Supply**: Four independent power rails at 5V, 3.3V, 2.5V, and 1.2V; Power supplied by a power connector or USB; DC Input Jack. Input Voltage: 6.5-10V.	3
11	Ceiling Fans	5