



Engineering A Better Tomorrow
An Autonomous Institute

Approved by AJCTE, New Delhi
Affiliated to Visvesvaraya Technological University, Belagavi
Recognized by UGC with 2(f) and 12(B) status
Accredited by NBA and NAAC

**MVJ College of Engineering, Near ITPB,
Whitefield, Bengaluru-560067**

Phone No: +91 80 4299 1000

Date: 01/03/2023

Fax: +91 80 2845 2443

E-Tender Notification

Supply of Scientific equipment for ROBOLAB

MVJ College of Engineering, Bengaluru invited e-tenders from eligible, reputed, and experienced manufacturers/authorized dealers for the supply of scientific equipment to department of Electronics and communication Engineering under the scheme of K-FIST (L1) sponsored by Vision Group on Science and Technology as per Karnataka Transparency in Public Procurement Act-1999 and Rules 2000. We are issuing this tender for supply of "Scientific Equipment" from the eligible bidders.

The Tenderers who have registered under e-governance department of Government of Karnataka may participate through e-tendering system. Tender documents may be downloaded from the e-Procurement website <https://eproc.karnataka.gov.in> from 02.03.2023 to 02.04.2023. The approximate tender value is Rs.10.00 Lakhs and EMD is Rs.5,000/-.

The eligible tenderer shall submit the e-tender in single cover system (price bid) under e-procurement platform on or before 02.04.2023 within 4:00 pm. The price bid will be opened on 02.03.2023 at 11:00 am. For further information on e-Tender participation (if any), please contact e-procurement help desk on Ph: +91 80 46010000, +91 80 68948777

support@eprochelpdesk.com <https://eproc.karnataka.gov.in>

(Working Hours: Monday to Saturday 9:00 am to 9:00 pm, excluding Second Saturday)

02/03/2023
Principal,

MVJCE,
Bengaluru-560067.

**MVJ College of Engineering, Near ITPB,
Whitefield, Bengaluru-560067**

Tender notification for the Supply of scientific equipment for ROBOLAB
MVJCE ranks high in Bengaluru for its singular dedication to world-class engineering and management education. From being the first (under VTU) to offer Aeronautical Engineering courses, to earning 66 University ranks in the last 4 years alone (142 ranks in the last 10 years alone), we enjoy a solid reputation among the student community, particularly those with a passion for engineering.

- A remarkable 40 years of existence and an outstanding pedigree in education backed by MVJ Group of Institutions, a name synonymous with excellence in academics.
- A focus on holistic development of the student through sports, extracurricular activities and soft skill programs that enhance self-motivation, creativity, social skills, confidence, and character.
- A highly qualified faculty driven by passion and dedication. 100% of our faculty either have a postgraduate or a doctoral degree.
- A spirit of research - 8 departments at MVJCE are recognized by Visvesvaraya Technological University (VTU) as Research Centers. We encourage research even among undergraduate students.
- A pro-active environment for progressive learning and a befitting modern infrastructure.
- The drive to raise the bar of academic performance as proven by the growing number of university ranks and the consistent 96% results every year.
- Positioned 4th in Visvesvaraya Technological University (VTU) for academic performance in 2016-17

Vision Group of Science & Technology, Government of Karnataka has sanctioned a research grant of Rs.10 Lakhs to Department of Electronics and Communication Engineering under the scheme **K-FIST (L1) PHASE 2**. The college intends to develop infrastructure facilities to carry out the research work by purchasing the required equipment under VGST Research Grant.

Interested firms who wish to supply can apply through the e-procurement platform electronically (in the prescribed format) on or before **02.04.2023 by 4.00 pm**.

1. Equipment Specification (Technical Bid) by the college is enclosed in Annexure-I

- i. The firm wish to apply, shall do so through the e-procurement platform of Government of Karnataka electronically (in the prescribed format) on or before **16.03.2023** within **4:00 pm**. Tender processing fee should be paid electronically to the e-procurement account.
- ii. Certified copies of the relevant documents need to be scanned and uploaded.
- iii. All the tender documents can be downloaded from the e-procurement website:
 - <https://eproc.karnataka.gov.in>
 - Additional information may be obtained from e-procurement help desk.
For further information on e-Tender participation (if any), please contact e-procurement helpdesk on Ph: +91 80 46010000, +91 80 68948777
support@eprochelpdesk.com

The Firm should be familiar with:

- i. The Karnataka Transparency in Public Procurement Act. (KTPP Act-1999 and Rules-2000) and its relevant amendments from time to time.
- ii. E-procurement procedure of Government of Karnataka.

2. Important Information/Instructions:

- i. The Scientific Equipment's supplied by the firm shall be as per our specifications
- ii. The tender should contain **Price Bid** in format specified in **Annexure-III** and the details of the tenderer should be in format prescribed in **Annexure-II**
- iii. All the documents should be attested by the Gazetted Officer
- iv. Time Schedule is as given in the table below
- v. In case the last date falls on Government Holiday, the next working day shall be the last date.

Sl.No.	Details	Periods
1	Downloading of Tender documents	02.03.2023 to 02.04.2023, at 4:00 pm
2	Uploading of Tender details	02.03.2023 to 02.04.2023, at 4:00 pm
3	Date, Time, and Place of Opening Tender	03.04.2023 at 11:00 am.- Price Bid Office of the Principal, MVJCE, Bengaluru 560067

4. Tender Opening Committee:

- | | |
|-----------------------------|----------|
| ▪ Director | Chairman |
| ▪ Principal | Member |
| ▪ Vice Principal | Member |
| ▪ HOD, Department of ECE. | Member |
| ▪ Coordinator, VGST Project | Member |
| ▪ Finance Officer | Convener |

5. Tender Verification Committee:

- | | |
|-----------------------------|----------|
| ▪ Director | Chairman |
| ▪ Principal | Member |
| ▪ Vice Principal | Member |
| ▪ HOD, Department of ECE. | Member |
| ▪ Coordinator, VGST Project | Member |
| ▪ Finance Officer | Convener |

6. Tender Accepting Authority:

- Principal

7. Mandatory Documents to be Signed and Uploaded by the Tenderer:

The Tenderer must upload the attested copies of the following documents along with the Technical Tender:

- Registration Certificate under Shops and Establishments Act
- Goods and Service Tax Registration Certificate and its renewals from time to time
- Income Tax PAN Card of the tenderer.
- Income Tax Returns filed by the firm for the previous 3 years
- Balance sheet for Turnover certified by Chartered Accountant for the previous 3 years
- Experience Certificate issued by the suppliers during previous three years.
- Self-declaration on a stamp paper of Rs.50/- stating that "the firm has not been blacklisted" under Karnataka e-Procurement platform
- Vendor shall produce the PO (Purchase order) copy installed at any IIT/ NIT/Other colleges for the specified equipment with similar specifications.
- The tenderer should quote the gross total amount in Annexure-II of e-procurement portal along with all taxes, charges etc. and the split-up amount should be entered in Annexure-III which has to be uploaded.

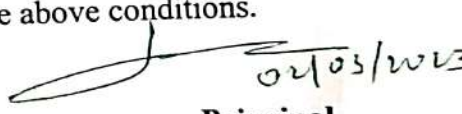
8. Essential Terms and Conditions to be followed by the Tenderer:

- The successful tenderer cannot sublet the tender to others. In case of violation, the full amount of the EMD shall be forfeited
- The MVJ College of Engineering, Bengaluru retains the power to accept or reject the scientific equipment supplied by the firm, if the specifications are not met.
- The successful tenderer must execute an Agreement Bond on a Stamp paper of Rs.100 stating that "**the Tender shall be executed as per the terms and conditions prescribed by the MVJ College of Engineering, Bengaluru**" (along with other details in the prescribed format) within one week from the date of issue of order, otherwise tender will be cancelled.
- The EMD amount of Rs.5,000/-shall be paid online.
- TENDER PERIOD:** Validity of the tender is 30 days from the date of opening of the tender (i.e Tender period: from **02.03.2023 to 02.04.2023**)
- The firm should adhere to the additional conditions imposed by the institute from time to time.
- One who has quoted the lowest rates shall be considered as a lowest bidder taking into consideration of rate, quality, technical specifications, and other charges.

9. Other Terms and Conditions:

- There shall not be any revision in the accepted tender rates and terms and conditions of PO during the tender period
- All the original documents are to be produced for verification at the time of opening of tender. Submission of Bid without documents, wrong/incomplete information will be rejected.
- Any action on the part of bidder/tenderer to influence any officer of the institute or canvassing of any form shall make the tender liable for rejection
- Any issue/s arising during the tender period, the decision of tender accepting authority (i.e Principal) is final
- The principal is empowered to accept or reject any tender without assigning any reason
- Failure to supply the required Scientific equipment well in time is liable for rejection of tender, and forfeiting of the EMD

- vii. Non-satisfactory quality of Scientific equipment of the tender agreement is liable for cancellation of tender, by issuing a one-week notice
- viii. The successful tenderer is wholly and solely responsible for supply of scientific equipment well in time without any delay
- ix. Any negligence on the part of the tenderer shall be held solely responsible and liable for payment of compensation for damage caused to the college property/assets etc.
- x. Any dispute, clarifications on the tender matters, the decision of the Principal is final; and the tenderer shall agree to the condition that no suits shall be filed in any court of law on the issues related to the tender
- xi. Prices shall be for Instruments, inclusive of all taxes, CST/VAT/GST, import duty, Door delivery, assembly, installation, demonstration; Warranty; Post-installation service and Training to students at the supplier's Application-cum-R&D facility.
The details of amount split up with respect to each item must be entered in Annexure-III and should be uploaded.
- xii. DSIR (Department of Scientific and industrial Research) certificate for Excise duty and Customs duty shall be provided.
- xiii. Payment shall be made after satisfactory installation and demonstration with working condition
- xiv. The Foreign exchange rate for Indian Rupee (INR) shall be as per the existing rate on the day of Purchase Order (P.O.) release.
- xv. The equipment should be delivered at the following address
Delivery Address: MVJ College of Engineering
Near ITPB, Whitefield, Bangalore -560067
- xvi. The tender stands rejected on failure to fulfill any one of the above conditions.




Principal
MVJCE, Bengaluru 560067

MVJ College of Engineering, Near ITPB, Whitefield, Bengaluru-560067
Annexure-I

TECHNICAL SPECIFICATION OF EQUIPMENT
(For Non-Recurring Expenditure only)

Sl. No.	Name of Equipment & Accessories	Quantity	Details of Technical Specification as indicated/proposed in the e-procurement document
1	Laser Cutting machine	1	<p>Working Area: 1300 * 900/1300 * 2500mm</p> <p>Laser Types: Sealed CO2 Laser Tube RECI, 10.6 μm</p> <p>Laser Power: 80W, 100W</p> <p>Engraving speed: 0-60,000mm/min (according to different materials)</p> <p>Cutting speed: 0-40,000mm/min (according to different materials)</p> <p>Laser Output Control: 0-100% set by software</p> <p>Working table: Blade worktable</p> <p>Control system: DSP Control System</p> <p>Highest Scanning Precision: 4000 DPI</p> <p>Colour Separation: Yes</p> <p>Voltage: AC 220v/50-60Hz</p> <p>Minimum shaping Character : English 1.0 x 1.0mm</p> <p>Drive System: Stepper Motor and Drive</p> <p>Cooling mode: Water-cooling and protection system</p> <p>Compatible Software: CorelDraw, Auto CAD, PhotoShop</p> <p>Graphics format supported: BMP, CIF, JPEG, TGA, TIFF, PLT, AI, DXF, DWG, etc</p>
2	Battery pack for e-kart, Charging unit and Battery management system	4	<p>Nominal voltage: 48V</p> <p>65 X Li-ion 3.7V 2600mAh cells (13S5P)</p> <p>Nominal Capacity: 13000mAh</p> <p>Charging current: 6.50A</p> <p>Maximum charging current: 13A</p> <p>Continuous Discharging current: 10 A</p> <p>Max. discharging current: 26A</p> <p>Weight: 3Kg</p> <p>Battery management system:</p> <p>Cell- Config - 13S5P</p> <p>Current: 40A</p> <p>Voltage: 26V - 48V</p> <p>Thermal Protection</p>
3	Jet Bot	4	<p>Jetson Processor 128-core Maxwell, Quad-core ARM A57 @ 1.43 GHz, 4 GB 64-bit LPDDR4 25.6 GB/s 2x MIPI CSI-2 DPHY lanes</p> <p>Jetson Compatible Camera</p> <p>Jetson Compatible Chasis</p> <p>Wheels and Motor set</p> <p>Jetson Compatible Motor Driver plugin</p> <ul style="list-style-type: none"> • Caster and other mechanical Components
4	Intel RealSense Depth Camera D435i	1	<p>Inertial measurement unit - BMI055</p> <p>Use Environment - Indoor/Outdoor</p> <p>Depth Technology - Active IR stereo</p> <p>Main Intel® RealSense™ component - Intel® RealSense™ Vision Processor D4</p> <p>Intel® RealSense™ module D430</p> <p>Depth Field of View (FOV) - 86° x 57° (±3)°</p>

			Depth Stream Output Resolution - Up to 1280 x 720 Depth Stream Output Frame Rate- Up to 90 fps Sensor Shutter Type - Global Shutter Maximum Range - Approx. 10 meters; Varies depending on calibration, scene, and lighting condition RGB Sensor Resolution and Frame Rate - 1920 x 1080 at 30 fps RGB Sensor FOV - 69.4° x 42.5° x 77° (+/- 3°)
5	TF02-Pro LIDAR	2	Distance Ranging Sensor FOR DRONES UAV UAS Robots (40M)
6	RPLiDAR A1M8	2	360 Degree Laser Range Finder – 6 metres (Radius Range)
7	Humanoid robot -7 degree of freedom	4	7 Degree of Freedom servocontrolled robot
8	Humanoid robot -17 degree of freedom	4	17 Degree of Freedom servocontrolled robot
9	Customizable 16 axis Robot kit	1	Product Dimensions 15.7"*8.2"*4.8" Product Weight: 3.59lbs 16 high torque digital servo motors Eye and Ear helmet LED's Embedded 3W mono speakers Rechargeable Li-ion Battery (>60mins/time) External storage :128MB, Max support up to 32GB Bluetooth 3.0/4.0

Signature of Chairman	 Signature of Principal	 Signature of Program Coordinator
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