



Tender Notice | Purchase of NRPU Project Equipment

1. The “*Design and Validation of an AI-Driven Unified Control System for Electric Vehicle Powertrain and Charging Optimization*”, funded under **HEC-NRPU at Karachi Campus** of the University invites sealed bids from the authorized distributors (With Valid Distribution Certificate)/suppliers/well-reputed firms/service providers registered with Income Tax and Sales Tax Departments and who are on Active Tax Payers List (ATL) of the Federal Board of Revenue, for the purchase of following **Twenty three (23)** items/lab equipment for the mentioned quantities for HEC – NRPU Project Ref. **164540– 60**.

Sr.#	Name of Item/Equipment	Qty
I	Core Real-Time HIL Platform	1
II	Bidirectional DC–DC Buck–Boost Converter	2
III	Three-Phase DC–AC Inverter for EV Traction Motor	1
IV	Gate Driver Boards for EV DC–DC Converter / Three-Phase Inverter	2
V	EV-Type Three-Phase Electric Motor	1
VI (a)	Motor Dynamometer	1
VI (b)	Programmable Electronic Load	1
VII	Mechanical Coupling, Mounting Base & Safety Guard	1
VIII	Bidirectional DC Power Supply (Battery Emulator)	2
IX	Programmable DC Power Supply (Fuel-Cell Emulator)	1
X	Wireless Power Transfer (WPT) Transmitter & Receiver Coil and AC to DC converter	1
XI	High-Frequency Resonant Inverter & Compensation Network for WPT	1
XII	300 Vrms-Class Isolated Voltage Input / Measurement Module	1
XIII	AC/DC Current & Voltage Data Acquisition Module	1
XIV	Industrial 4-Channel Analog Output (AO) DAC Module	1
XV	Host PC / Workstation for EV Simulation, HIL & Machine Learning	3
XVI	Small-Capacity EV Battery Module	1
XVII	Supercapacitor Module	1
XVIII	Unidirectional DC–DC Boost Converter	1

XIX	DC Bus / DC-Link Assembly	1
XX	Motor Speed Sensor	1
XXI	Isolated CAN Transceiver	1
XXII	Isolated DC Voltage Sensor	7
XXIII	Isolated DC Current Sensor	7
Total		41

2. Bidding shall be carried out by “Single Stage Two Envelope” procedure. Bidding documents containing detailed terms & conditions etc. are available at Procurement Office/ Basement 1/ Academic Block 1/ Main Campus/St-4 Sector 17-D On National Highway Karachi, Pakistan. Tender notice and bidding documents can also be downloaded from www.nu.edu.pk/Events/Details/551
3. The bids having separate sealed envelopes clearly marked as **Technical and Financial Bid**, prepared in accordance with the instructions as mentioned in the bidding document, must reach on or before **Tuesday, September 29, 2026, until 14:30** at Procurement Office/ Basement 1/ Academic Block 1/ Main Campus/St-4 Sector 17-D on National Highway Karachi, Pakistan. **Technical Bids** will be opened on the same day, i.e., **September 29, 2026, at 15:00 Hours** in the presence of bidders/their representatives. The second envelope containing “**Financial Bid**” of technically qualified bidder(s) will be opened later, the date of which will be communicated after the evaluation of Technical Bids.
4. The University reserves the right to accept or reject any/all bid(s) as per the prescribed Procurement Rules of the University.

Procurement Department
FAST – National University of Computer & Emerging Sciences,
Karachi