


List of Research Equipments available in Electrical and Electronics Department

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| Department Name: Electrical and Electronics Engineering |
| Equipment Name: Photovoltaic Tester |
| Specifications: METREL - MI3108 ST: Electrical and Photovoltaic Tester |
| Price : Rs. 2,94,000 |
| Functions: Eurotest-PV is a combined photovoltaic tester and electrical installations safety tester. It performs all necessary tests required on single-phase photovoltaic (PV) installations. The unit is designed for the demanding working conditions (up to 1000 V, with 15 A DC). |
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Department Name: Electrical and Electronics Engineering

Equipment Name: Tan Delta & Resistivity Test Set

Specifications: Dielectric constant, Tan Delta & Resistivity Test Set

Price : Rs. 4,77,568

Functions: The Oil Tan Delta (OTD) is a laboratory instrument, which measures the Tan Delta, Resistivity and Relative Permittivity of insulating liquids. These tests give a wider picture of the overall quality of the insulating oil, and will indicate if there is any contamination.



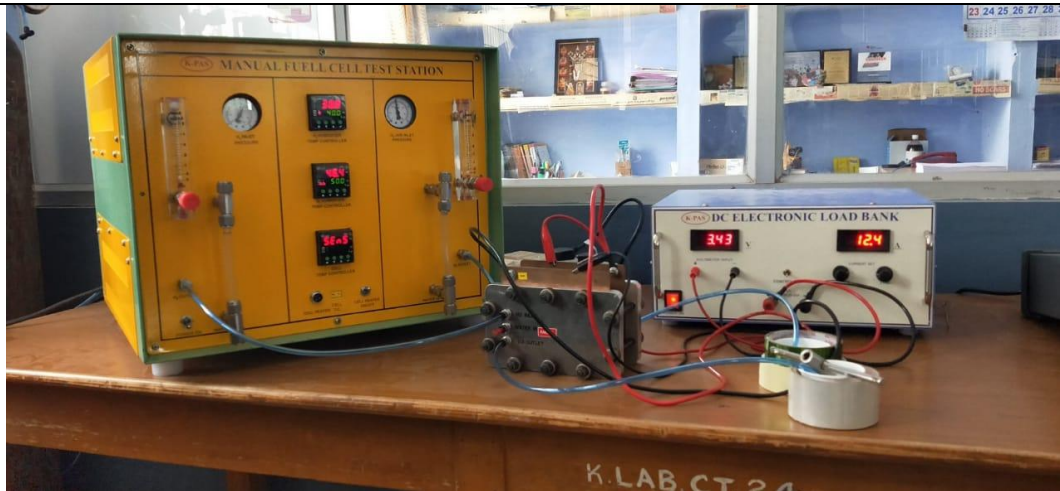
Department Name: Electrical and Electronics Engineering


Equipment Name: Fuel Cell Test Station


Specifications: Fuel Cell Test Station

Price : Rs. 5,29,174

Functions: The purpose of a fuel cell is to produce an electrical current with hydrogen and oxygen. It features reactant gas flow, MFC, Temperature measurement control. H_2 & O_2 – flow 0-5 LPM and humidification level of $40^\circ C$ - $60^\circ C$ It can supply load up to 80 Watts



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| Department Name: Electrical and Electronics Engineering |
| Equipment Name: Programmable AC Power Source |
| Specifications: Programmable AC Power Source |
| Price : Rs. 10,69,180.37 |
| Functions: The Chroma Programmable AC source model 61700 series delivers pure, 5-wire, 3-phase AC power.Voltage: 0-150V/0-300V, Frequency: 15-1.2KHz.OP, OC, OV and OT protection, GPIB and RS-232C interface and data logging |
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| Department Name: Electrical and Electronics Engineering |
| Equipment Name: DSPACE |
| Specifications: ACE_MLBX_1302T - DSPACE |
| Price : Rs. 14,70,000 |
| Functions: MicroLabBox lets you set up your control, test or measurement applications quickly and easily, and helps you turn your new control concepts into reality. Matlab simulations are interfaced in RTI to implement in hardware platform. More than 100 I/O channels are available |
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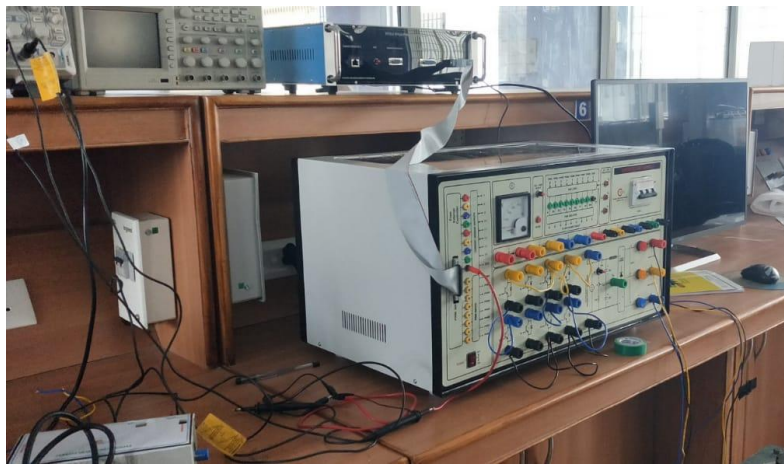
Department Name: Electrical and Electronics Engineering

Equipment Name: IGBT Power Module

Specifications: SEMIKRON IGBT Power Module 5kW

Price : Rs. 5,93,460

Functions: SEMIKRON IGBT based universal power module with the power range of 5 kW. This module can be configured to DC-DC converter, Inverter, Rectifier and cyclo-converter. Pulses are simulated and generated through FPGA-RTI. PWM driver and protection control are enabled



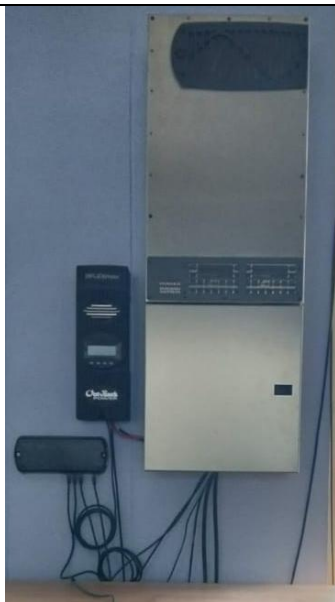
Department Name: Electrical and Electronics Engineering

Equipment Name: Micro Grid

Specifications: Micro Grid

Price : Rs. 3,93,037

Functions: The micro grid comprises of the 3kWp solar photovoltaic plant, 7kVA inverter, and controller terminal, charge controller and communication devices. In addition, a wind energy conversion system of 2kWe, 8 numbers of 12V/150Ah VRLA battery and fuel cell of 80 watts are connected at input to form the 'hybrid structure'



Department Name: Electrical and Electronics Engineering

Equipment Name: Battery Simulator

Specifications: TEKTRONIX-KEITHLEY 2281S - Battery Simulator TEKTRONIX-KEITHLEY 2380 - Programmable DC Electronic Load

Price : Rs. 3,88,500

Functions: It is able to analyze the DC consumption of a device under test, test a battery and generate a battery model based on the battery charging process, and simulate a battery based on the battery model. Power rating up to 20V and 6A and sink current up to 1A.



Department Name: Electrical and Electronics Engineering

Equipment Name: MSO

Specifications: 70 MHz mixed signal oscilloscope

Price : Rs. 1,14,392

Functions: To measure the mixed signals in a common scope, capable to measure both analog and digital signals at the same time. It can handle upto 70Mhz of frequency

