



Basic Electricity and electronics modular setup build with 40X40mm Aluminum profile rack with sturdy table top flat panel and option to hang the PC Monitor in the Profile

The module consists of 8 ABS/MS panel mounted on the aluminum rack with mimic diagram, all input & output are terminated in 4mm shrouded banana connector. Basic Theorems, Laws and Under-standing Unit.

Variable Programmable DC power supply with sweep facility up to 50V/5A with LCD display for Voltage, Current and Power indication, CC/CV Protection, and Various Fixed voltages to perform various experiments. made easy to set the desired voltage and other parameters using decoders.

Peripheral Module:

AC Voltage Bank, Capacitor and Inductors Bank Module, Resistors Bank Module, Potential Meter Bank, Programmable Load Bank Module, Bridge Module, Transformer Bank Modules. Bar Magnet & Magnetic Compass. Digital Gates unit:- Input Switches, four Line Driver, AND Gate, NAND Gate, OR Gate, EX-OR Gate, Inverter.

List of Experiments:

- Basic laws of electrical engineering
- How to use oscilloscope, multimeter and function generator.
- DC, AC and three-phase current systems
- Voltage, temperature and light dependent resistance
- Behavior of semiconductors: diodes, transistors, thyristors
- Amplifiers
- Operational amplifiers
- Signal generators
- Power supply circuits

Measuring Panel

- Three phase Multifunction meter panel.
- Bidirectional Multifunction
- 3 Phase $\frac{3}{4}$ wire, 415V, CT Input 5A
- LCD/LED Display, Aux supply 230V, 45-65 Hz, 5W
- V, I., Hz, Pf, KVA, KW, KWH
- **Single Phase Variac Panel:** 0-230V /3A Variac, Single Phase Transformer 200VA, 0-220V Primary input (1x2 socket), 0-220V Secondary output (2x2 socket).
- **Load Bank:**
 - ♦ Single Phase RLC Load
 - ♦ Programmable Inductive Load panel 0-0.75-3H
 - ♦ Inductive Load.
 - ♦ Programmable Capacitive Load panel.

Multifunction Measurement Module (optional)

Features: The Multifunction meter, with a frequency range of 50 MHz and a resolution of 14 bits, is a very powerful and precise multifunction measurement device that can replace a stack of lab instruments. It is small and portable, and its Ethernet/Wi-Fi connectivity allows you to perform measurements remotely.

- Digitally Stored Readings.
- Programmable Signal Generation
- Web and Mobile Based Visualization Options
- Options to interface with NI-LABVIEW and MATLAB

Note: Specifications are subject to change.