

Electronic Work Station

An integrated workbench consisting of instrument panels and working table is suitable for students to learn and perform various experiments of electronics and electrical related subjects. Instruments are internally electrically connect and is fitted in the panel such that only front panel and necessary interfaces are easily accessible to use. The structure is made up of 1.5 mm thick CRC powder coated pipes with top made up of good quality 19 mm thick plywood and covered with 1.8 mm off white colour mica. The bench working area covered by a 2 mm thick antistatic mat which help students to controls static discharge as static cause interference or damage to students, equipment and all Accessories.



Note Shown image is just for illustration original may differ

Electrical Sockets And Switches (for External Use)

- ❖ Two Pole MCB - 32- 01
- ❖ Mains Supply - 230VAC, 50 Hz.- 01
- ❖ 15 Amp. Socket provision with Switch (Modular)- 01
- ❖ 5 Amp. Socket provision with Switch (Modular)- 06
- ❖ RCCB 40AMP-01

Structure and Design of Work Bench:

- ❖ Structure of workbench made up of 1.5 mm thick CRC powder coated pipes with top made up of good quality 19 mm thick plywood and covered with 1.8 mm mica.
- ❖ The basic structure made of 38 x 38 x 1.5 mm CRC powder coated pipes for sturdiness.
- ❖ The overall dimensions of Workbench* not less than W = 1200 mm; D = 750 mm; H = 1150 mm
- ❖ MS drawers 03 numbers W = 275 mm; D = 375 mm; H = 100 mm and thickness 1.2mm with handle and separate lock on each drawer provided
- ❖ For the panel section, raised back height of 1200mm from floor with matching height support
- ❖ From the side at a depth 500mm for instrument housing with a MS Panel strip below it for housing
- ❖ Supplied with Power cable, Probes, Instruction manual

100 MHZ 2 CHANNEL DIGITAL STORAGE OSCILLOSCOPE :

100 MHz Two Channel Digital Storage Oscilloscope has sampling rate of 1 GSa/s (single-channel), 500 MSa/s (dual-channel), Memory Depth is more than standard 20 Mpts (single-channel) and 10 Mpts (dual-channel); Horizontal range : 2 ns/div to 50 s/div; Vertical range : 500 uV/div to 10 V/div ;Vertical Resolution 8 bits; math functions : A+B, A-B, AxB, A/B, FFT, A&B, A||B, AAB, !A, Intg, Diff Sqrt, Lg, Ln Exp, Abs, Filter; FFT.

Window Rectangle, Hanning, Blackman, Hamming, Flat Top, Triangle; Half, Full FFT display; Low Pass Filter, High Pass Filter, Band Pass Filter, Band Stop Filter. 7.0-inch TFT LCD display. Supports USB Host, USB Device, and LAN connectivity.

Component Tester: To work with DSO to test short circuit, open circuit, polarity testing of diode and transistors comparative test for trouble shooting of electronic circuits.

25 MHZ ARBITRARY WAVEFORM GENERATOR :

This generator 125MSa/s sample rate, 16bit vertical resolution, 7 Digit 240MHz frequency counter, min 150 built in waveform, 8 Mpts record length, min 8th order harmonic generator and 4.3 inch touch screen display.

4 ½ DIGIT DIGITAL MULTIMETER :

Digital Multimeter has facility of measurement of AC /DC voltage, AC/DC current, Other specification: Measurement: DC Voltage, AC Voltage, DC Current, AC Current, Resistance, Temperature, Capacitance, Continuity and Diode Testing

DCV upto 1000V

ACV upto 750V

DCA: 20mA/200mA/2A/20A

ACA: 200mA/2A/20A

Resistance: 200W/2KW/20KW/200KW/2MW/20MW Frequency: 20 kHz/200kHz Capacitance: 20nF/2mF/200m

DUAL DC POWER SUPPLY :

- ❖ Pre-Regulator based design
- ❖ Floating DC Supply voltages
- ❖ Dual DC : 2 x 0 - 30 V/ 2 A
- ❖ Automatic Overload Current Protection
- ❖ Voltage and Constant Current Operation
- ❖ Display for Voltage and Current
- ❖ Adjustable Current Limiter
- ❖ Excellent Line and Load Regulation
- ❖ Ripple Voltage



The Workbench set up has Blended Learning Software with having built-in 20,000 or more component libraries. Enable build circuit and test it for different input conditions. It is capable of building and testing Analog, Digital, Mixed, etc. Supports PCB Design and able to generate g code and Gerber files. Include all major Hardware Description Languages are included: VHDL, Verilog, VerilogA, VerilogAMS, and System.

The set up is includes Classroom, laboratory, lean teaching content module on Basic Electronics. Covers Topic as Electronic Components, Series and Parallel Circuits, Divider and Current Divider Circuit, Circuit Analysis etc.