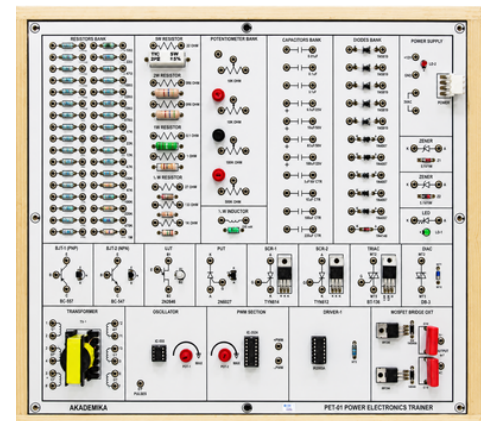


BEL-PET Power Electronics Trainer Kit



FEATURES

- Single board system, capable of covering different power electronics experiments
- IEEE symbol of all components provided on the PCB.
- All Components visible clearly on the top of the PCB.
- Mobile based Interactive e-Manual

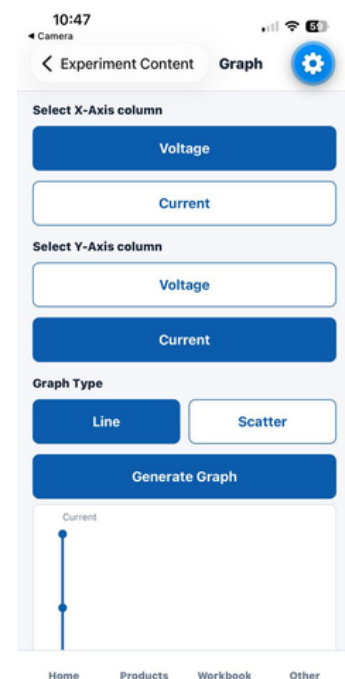
SPECIFICATIONS

- Power Supply: 30V AC & 12V DC
- On-board passive & active components
- THYRISTORS (SCR (TYN604), TRIAC(BT-136), DIAC(DB-3), UJT(2N2646), PUT (2N6027), MOSFET(IRF-Z44N), BJT PNP(BC-557), BJT NPN (BC-547))
- Oscillator (IC 555) with a tuning pot should be provided
- 12 TAP Transformer with different number of windings
- Resistor bank (34 Resistors)
Range from : 10 Ω to 910 K Ω ($\frac{1}{4}$ watt)
- Different wattage Resistors (8 Resistors)
Range from : 0.1 Ω to 1M Ω
Range from : 1/2 W to 5 W
- Capacitor Bank (11 capacitors)
Range from : 0.01 μ F to 220nF
- Inductor $\frac{1}{2}$ W : 100 μ H
- Potentiometer bank (4 pots)
Range from : 100 Ω to 500K Ω
- Diode Bank (11 diodes)
1N4007_5 nos.
1N5819_5 nos.
1N4148_1 nos.

EXPERIMENTS

- Using SCR
- Study of single-phase half wave control
- Study of full wave controlled rectifier
- Study of single-phase DC to AC inverter
- AC power flasher using SCR
- Lamp Dimmer Circuit using DIAC-TRIAC

- DC to DC converter (dual)Low voltage lamp flasher using PUT and SCR
- LED flasher using SCR and UJT
- Study SCR triggering using Ic555
- SCR time delay relay



Mobile based Interactive e- manual