

PC BASED POWER ELECTRONICS TRAINER

New
ED-1430

- 5 experimental modules for power electronics covering basic theory and applied experiments
- Capable of real-time measurements on PC by linking it to CBIS-1400 model
- By connecting PC to the Docking station, contact control is implemented on MMI(HMI) based software
- Report on experimental results & electronic manual on PC



> CONFIGURATION

- ED-1430 : PC Based Power Electronics Trainer
 - » Number of modules : 5ea
 - » Module dimension : 290(W) x 210(H) x 26(D)mm
 - » Module storage cabinet(1ea) : 596(W) x 318(H) x 255(D)mm
- Required System
 - » DS-1410 : Docking Station(Optional)
 - › Please refer to page 24 on DS-1410 specifications
 - » CBIS-1400 : Computer Based Instrument System(Optional)
 - › Please refer to page 22 on CBIS-1400 specifications
 - » Computer(Optional)

> SPECIFICATIONS

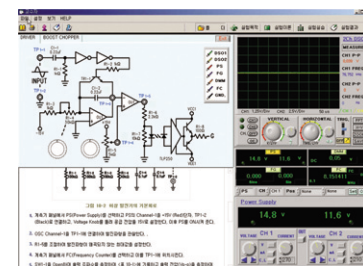
Pentium IV or above 1.7GHz or above

- RAM 512M or higher
- Hard Disk Min. 500Mbyte free space
- USB 2.0 compatible
- Windows NT4.0/2000/XP
(Recommended OS : Windows XP)

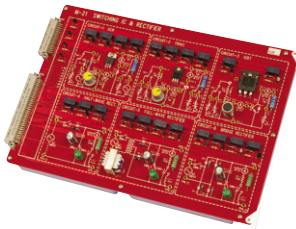
ACCESSORIES

- Connection cord : 1set
- AC Power Cord : 1ea
- Program CD : 1set
- User's manual : 1ea

Operating Software

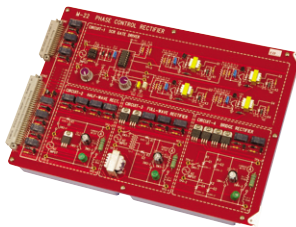


Experimental Modules



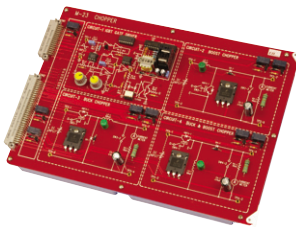
M-21 PHASE CONTROL RECTIFIER

- To understand SCR Gate Driver's characteristics and SCR phase control methods
- To identify the courses of SCR phase control and each circuit's status by the phase variation
- To be acquainted with half-wave, full-wave and bridge rectifier circuits
- To learn the peripherals of rectifier circuit and purpose of insertion
- To grasp the rectifier's efficiency and change by the load variation
- To familiarize the Bridge Rectifier Circuit's rectification courses and adjacent circuits



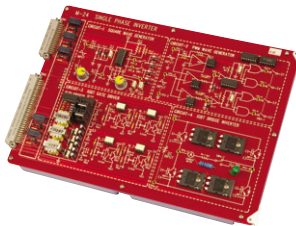
M-22 CHOPPER

- To learn the characteristics and control process of IGBT Gate Driver
- To grasp the operation principles of Boost, Buck, Boost and Buck Chopper Circuits
- To identify the purpose of use and characteristics of Chopper



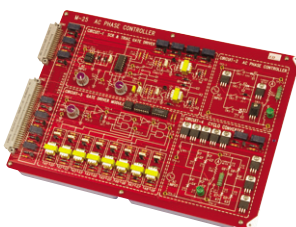
M-23 ELECTRISC POWER DEVICE & RECTIFIER

- To be acquainted with each characteristics of power electronics components and their operation principles
- To learn the SCR, TRIAC and IGBT characteristics and their purpose of use
- To grasp the operation principles of full-wave, half-wave Bridge Rectifier Circuits and load variations



M-24 SINGLE PHASE INVERTER

- To illustrate the characteristics and operation principles of the bridge using IGBT
- To familiarize each process of Inverter and its operation principles
- To understand each process of PWM and IGBT Driver's operation principles
- To learn the circuits adjacent to Inverter and operation principles of each circuit



M-25 AC PHASE CONTROL

- To grasp SCR & TRIAC Driver's operation principles and familiarize the test points
- To understand the operation principles of AC Phase Control and characteristics of each element
- To familiarize CYCLO converter's operation principles, purpose of use and conversion process
- To identify operation principles of the circuits adjacent to CYCLO Converter and their purpose of use
- To understand the process and characteristics of phase control by SCR, DIODE and TRIAC elements