

CPE-EO2220N

Basic Electricity & Electronics Trainer



EXPERIMENTAL CONTENTS

- Electric current flow
- Ohm's Law
- Conductor resistance
- Resistance and temperature
- Resistance in series / parallel connection
- Voltage divider in series resistance
- Current divider in parallel resistance
- Voltage drop by resistance
- Principles of voltmeters and voltage measurement
- Principles of ammeters and current measurement
- Principles of ohmmeters and ohm measurement
- Principles of the voltmeter
- Principles of the ammeter
- Principles of the ohmmeter
- Transformer and voltage transformation
- Δ and Y connection in 3-phase transformers
- Inductance and RL circuits
- Inductance in series / parallel connection
- Capacitance and RC circuits
- Capacitance in series / parallel connection
- Resonance of LC circuits
- Kirchhoff's laws
- Resistance bridge
- Single-phase and full-wave rectification
- Induced electromotive force
- How to use relays

FEATURES

- Consists of one modular rack, one storage cabinet and 14 types of panel modules
- Circuit diagrams printed on each of the panel modules
- Equipped with the parts and components complying a safety requirement
- Can provide an optional plug-in module for configuration of diverse circuits

SPECIFICATIONS

- I. Panel module (14ea)
 - 1) Dimension: 380(W) × 260(D) × 86(H)mm
 - 2) M01: Ohm's Law
 - 3) M02: Voltmeter
 - 4) M03: Ammeter
 - 5) M04: Ohm meter
 - 6) M05: Transformer & Voltage Transformation
 - 7) M06: Inductor & Inductance
 - 8) M07: Capacitor & Capacitance
 - 9) M08: LC Circuit & Resonance
 - 10) M09: Kirchhoff's Law
 - 11) M10: Resistance Bridge
 - 12) M11: 3-Phase Transformer Connection
 - 13) M12: Relay & Latch Circuit
 - 14) M13: Half & Full Wave Rectifier (1 \emptyset)
 - 15) M14: Generation of Electromotive Force
- II. Modular rack : Two-layer structure (aluminum)
- III. Storage cabinet: 1ea
- IV. Input voltage : 1-phase AC 110/220V, 3-phase AC 220V, DC 0 ~ 12V
- V. Plug-in module [OPTION]
 - 1) Resistance :
2.2 Ω , 4 Ω , 4.7 Ω , 10 Ω , 15 Ω , 20 Ω , 50 Ω , 100 Ω , 330 Ω , 470 Ω ,
1k Ω , 2k Ω , 2.7k Ω , 4k Ω , 10k Ω , 22k Ω , 100k Ω , 111k Ω , 2M Ω
 - 2) Lamp : 12V, 100V
 - 3) Toggle switch : 2ea
 - 4) Diode : 1ea
 - 5) Manganese : 0.5 \emptyset 1m, 0.5 \emptyset 0.5m, 0.25 \emptyset 1m, 0.25 \emptyset 0.5m
 - 6) Jump resistance : 2ea
 - 7) Copper wire: 0.1 \emptyset /1m (1ea)
 - 8) Capacitor : 0.001 μ F, 0.047 μ F, 0.1 μ F, 2.2 μ F, 4.7 μ F, 100 μ F, 470 μ F

STANDARD ACCESSORIES

- Power cord: 1ea
- Connection cable : 1set
- User's guide manual : 1ea