Light Dependent Resistor (LDR) Characteristics with Digital Meters

Model : SA-125DM

SINCOM SA-125DM Light Dependent Resistor (LDR) Characteristics with Digital meters is comprehensive remarkable trainer to study optical characteristics of LDR under different light conditions. The LDR have applications in smoke detection, automatic lighting control, batch counting, Optical receiver circuits and burglar alarm systems. The trainer is simply designed to study the LDR characteristics and determine its various parameters in a simple experimental way. The trainer is equipped with on board Digital voltmeter & Digital Ammeter and variable light intensity source.

Features

- Two LDRs of 5mm ceramic types are provided
- Passive Resistance output
- LDR used is CDS coated with epoxy, Fast response, High Sensitivity and good spectrum characteristics.
- High Dark Resistance and Convex front
- Current controlling resistor in series
- Facility to vary wide range of applied DC input voltage
- In-Built Variable regulated DC Power Supply
- Multi color Circuit Diagram is screen printed on the front of the white color acrylic board
- Enclosed in an attractive, light weight, High Quality, Poly Coated Australian Pine Wooden cabinet
- On Board $3^{1/2}$ Digit Digital Voltmeter and Ammeter
- On Board 60W Lamp load with variable light intensity
- User friendly Designed
- Very Easy for Operation
- Interconnections by 2mm high quality banana sockets and pins
- Maximum Test points to explore all the corners of experiment
- 1 Year Warranty

Technical Specifications

AC Mains Power Supply	: 230V ±10%, 50Hz
DC Power Supply	: IC Regulated variable 0V to +12V / 500mA
LDR Used	: 10KΩ and 100KΩ @
LDR Type	: NTC, CDs coated
Diameter and Front	: 5mm Front Convex
Viewing angle	: 50^0
Dark Resistance	: @10KΩ and 100KΩ under standard conditions
Maximum LDR Current	: 50mA under full light conditions
Maximum Operating Voltage	: 15V
Current Controlling Resistor	: MFR 100Ω, ±5% in series
Light Source	: 60W Lamp load max-Variable Intensity control

- Digital Voltmeter : 0-20V
- Digital Ammeter : 0-200mA
- Meter Display : Red Color, $3^{1/2}$ Digit , LED Display
- Weight : 2.0 kg (approx)
- Dimensions (mm) : L 220 x W 270 x H 110
- Interconnections : 2mm Banana sockets
- Operating Temperature : 0-50^{0}C, 80% RH

Learning Scope

- To Study operation of Light Dependent Resistor (LDR).
- To Study the characteristics of LDR of different values.
- To Observe & Note Change in LDR Resistance, Current & Voltage w.r.t. change in the intensity of light.

Other Instruments Required : Nil

Accessories Included

Set of Patch Cord, Lamp Load 60W with variable light intensity and Details Instruction Manual