



**55953** Joule's Constant Measurement Setup (by electrical method) is useful to determine the mechanical equivalent of heat. It consists of Calorimeter to isolate water thermally from the surrounding and Measurement Unit with LCD to display Voltage, Current and Time. According to Law of Conservation of Energy, electrical energy provided is equal to heat produced if very less heat is lost through the system. Current is passed in a coil to rise the temperature of known mass of water in a calorimeter. By measuring heat produced corresponding to the provided electrical energy, value of Joule's Constant is determined.

### Features

1. Complete setup for measuring Joule's constant
2. Constant current source
3. Calorimeter to prevent heat loss
4. LCD Display

### Object

1. To determine mechanical equivalent of heat (J) joule's constant by electrical method

### Technical Specifications

#### Power Supply

Input : 230V AC 10%, 50Hz  
Out put : 0-10V / 0-1.5A

#### Calorimeter

Material : Copper Container  
Volume : 140 ml

#### Heater Coil

Material : Nichrome  
Resistance : 50hm

#### Thermometer

Least count : 1°C  
Maximum range : 110°C

Note: Specifications are subject to change.