

## Physics Lab Equipments

### ME 934 - Adiabatic Gas Law Apparatus (Mechanical unit)

#### Objective :

- The apparatus enables the user to investigate the comparison and expansion of gases under near adiabatic condition / isothermal condition.



#### Technical Specification :

- Work Space(Height) : 70mm
- Metallic Cylinder : 40mm diameter
- Compression air jig with paddle compressor
- Dimension L X B X H : 300x310x500
- Power Requirement : 230V AC  $\pm 10\%$  50Hz
- Advance PIC Microcontroller based data condition Circuit
- Software based data acquisition system
- High Efficiency OP-Amps used for Signal conditioning Circuit
- Interface : USB Interface for PC Interface
- Software platform for logging the data
- Data Export Facility to MS-Excel with Printing
- Windows Compatibility
- One Click Graph Plot Option on Software
  - Pressure V/s Volume
  - Pressure V/s Time
  - Temp. V/s Time
  - Volume V/s Time

#### Accessories :

- Air Compressor
- Data Logging Interface Unit with PC Interface
- PC Software for Graph Plotting
- Signal interface Cable
- Power Cord 230V AC 50Hz Power Supply
- Laptop