



**eie INSTRUMENTS PVT. LTD.**  
(An ISO 9001 : 2008 Certified Company)



## BOMB CALORIMETER - AUTO CALCULATION WITH PRINTER AND PC INTERFACE – (WITH 0.001°C TEMP RESOLUTION)

The system will consist of the following parts and standard accessories along with instruction manual.

- Calorimeter vessel with bomb support & insulating base - **01**
- Water Jacket - **01**
- Combined lid for calorimeter vessel & water jacket - **01**
- Stirrer - **01 set**
- Connecting lead for calorimeter bomb - **01 set**
- Fine adjustment valve with built in pressure gauge- **01**
- Connecting tube to connect bomb, pressure gauge and fine regulating valve- **01**
- Safety Relief Valve fitted on gas filling tube adapter- **01**
- Pellet Press - **01**
- Spanner for Oxygen tube connection- **01**
- Ignition Wire - Nichrome - **01 Roll of 5 meter**
- Cotton Thread - **01 Roll**
- Stand for Bomb Lid - **01**
- Hook for Lifting Bomb - **01**
- Crucible SS - **01**
- Gas Release Valve - **01**
- Bomb Firing Unit - **01 Set**
- Differential Type Digital Thermometer complete with sensor-**01 No**
- O-ring for bomb & valve- **01 set each**
- Schrader Valve with Key - **01 each**
- Standard Benzoic Acid - **01 Bottle**



### Corporate Office:

A-1301, BVR Ek, Opp. Hotel Inder Residency,  
Near Gujarat College, Ellisbridge,  
Ahmedabad-380 006.  
Phone : (079) 6621 1234  
Website : [www.eieinstruments.com](http://www.eieinstruments.com)

### Calibration Laboratory:

B-14, Zaveri Industrial Estate, Opp. Shyam Villa,  
Singarva-Kathwada Road,  
Kathwada, Ahmedabad-382 430.  
Phone : (079) 6604 0660 • Fax : (079) 6604 0600  
E-mail : [info@eieinstruments.com](mailto:info@eieinstruments.com)

GST TIN No. : 24AABCE4018L1ZU  
I.T. PAN No. : AABCE 4018L  
IEC No. : 0813026598 Dt. 04/03/2014  
CIN No. : U29199GJ2004PTC045078  
TAN No. : AHME00572F



#### Salient Features of Microprocessor based controller

- Eliminates manual calculations
- Microprocessor based controller executes automatic calculations of Calorific Value
- **Temperature resolution of 0.001°C will be obtained.**
- Results can be printed on In-Built THERMAL PRINTER and can be transferred to PC.
- Automatic measurement and calculation of CALORIFIC VALUE / WATER EQUIVALENT
- JUMBO size 16 x 2 characters LCD display with back-light.
- Inbuilt RTC (Real Time Clock) which makes note of time and date of test.
- Thermal printer interface for printing the final result.
- **Thermal printer Printout Report Format for SAMPLE TEST**

1. COMPANY NAME & LOGO
2. TYPE OF TEST : SAMPLE TEST
3. MAX. TEMPERATURE RISE
4. MASS OF TABLET
5. WATER EQUIVALENT
6. FINAL CALCULATED CALORIFIC VALUE
7. DATE & TIME OF TEST

- **Thermal printer Printout Report Format for Water Equivalent Test**

1. COMPANY NAME & LOGO
2. TYPE OF TEST : WATER EQUIVALENT TEST
3. MAX. TEMPERATURE RISE
4. MASS OF TABLET
5. BENZOIC ACID CALORIFIC VALUE
6. FINAL CALCULATED WATER EQUIVALENT
7. DATE & TIME OF TEST

- 16 soft-touch Keypad for Menu driven settings of different parameters
- Automatic measurement and mathematical calculation of the calorific value/Water Equivalent; which eliminates the requirement of operator to be continuously present to note the maximum temperature rise & to do the calculations manually.
- Weight of tablet feed able through keypad by user.
- Water equivalent settable through keypad by user.
- Automatic calculation for Sample Test or Water Equivalent Test from maximum temperature rise value.
- Full test report printout with date and time .
- Sensor open detection.
- Fuse wire open detection.
- User friendly system handling messages on LCD
- Type of test selectable
- Internal Data Logger THROUGH Computer Interface.
- PC Software for Data Record

**Note: Resolution of 0.001°C Will be provided.**

#### Corporate Office:

A-1301, BVR Ek, Opp. Hotel Inder Residency,  
Near Gujarat College, Ellisbridge,  
Ahmedabad-380 006.  
Phone : (079) 6621 1234  
Website : [www.eieinstruments.com](http://www.eieinstruments.com)

#### Calibration Laboratory:

B-14, Zaveri Industrial Estate, Opp. Shyam Villa,  
Singarva-Kathwada Road,  
Kathwada, Ahmedabad-382 430.  
Phone : (079) 6604 0660 • Fax : (079) 6604 0600  
E-mail : [info@eieinstruments.com](mailto:info@eieinstruments.com)

GST TIN No. : 24AABCE4018L1ZU  
I.T. PAN No. : AABCE 4018L  
IEC No. : 0813026598 Dt. 04/03/2014  
CIN No. : U29199GJ2004PTC045078  
TAN No. : AHME00572F



**EIE INSTRUMENTS PVT. LTD.**  
(An ISO 9001 : 2008 Certified Company)



**Pre-Installation Requirements for all Bomb Calorimeters to be arranged by you:**

- Digital Top Pan Balance (0.0001 gm.)
- 2 KVA UPS with Batteries (30 min backup).
- RO (50 liter) approx.
- Oxygen Cylinder 99.9% Purity (47L, minimum 70 kg/cm<sup>2</sup> pressure).
- Clean Dust Free Room, Solid vibration free working table away from windows, ovens and other heat generating source.
- Any others consumable etc.

**Click here for working video : <https://www.youtube.com/watch?v=CxosLXJE3vs&t=149s>**

**Corporate Office:**

A-1301, BVR Ek, Opp. Hotel Inder Residency,  
Near Gujarat College, Ellisbridge,  
Ahmedabad-380 006.  
Phone : (079) 6621 1234  
Website : [www.eieinstruments.com](http://www.eieinstruments.com)

**Calibration Laboratory:**

B-14, Zaveri Industrial Estate, Opp. Shyam Villa,  
Singarva-Kathwada Road,  
Kathwada, Ahmedabad-382 430.  
Phone : (079) 6604 0660 • Fax : (079) 6604 0600  
E-mail : [info@eieinstruments.com](mailto:info@eieinstruments.com)

GST TIN No. : 24AABCE4018L1ZU  
I.T. PAN No. : AABCE 4018L  
IEC No. : 0813026598 Dt. 04/03/2014  
CIN No. : U29199GJ2004PTC045078  
TAN No. : AHME00572F