

6755 Solution Calorimeter

SPECIFICATIONS

Model Number:
6755

Precision Classification:
0.4 Class (1.5 – 5.0 °C rise at or near room temperature)

Working Temperature Range:
10 – 50 °C

Temperature Sensitivity:
0.0001 °C

Energy Measurement Range:
2 – 1000 calories

Energy Equivalent:
100 – 145 Calories/°C

Maximum Volume, Solute:
20 mL

Required Volume, Solvent:
90 – 120 mL

Balance Communication:
USB

Printer Communication:
USB

Network Connection:
TCP/IP via Ethernet

Dimensions (cm):
6755: 22w x 33d x 33h
6772: 56w x 36d x 31h

The Parr 6755 Solution Calorimeter, utilizing a unique rotating sample cell and a precise microprocessor-based thermometer, provides a moderately priced and easily operated instrument for measuring:

- Heats of Reactions
- Heats of Mixing
- Heats of Solution
- Heats of Dilution
- Heats of Wetting

Measurements are made at ambient temperature and at atmospheric pressure in either liquid-liquid or liquid-solid systems covering energy changes ranging from 2 to 1000 calories.

Reaction Chamber

All reactions in the 6755 Calorimeter are conducted in a fully silvered glass Dewar. The Dewar is supported within a stainless steel air can from which it is easily removed for filling or cleaning. A block of plastic foam surrounds the air can, with the entire assembly mounted in a rugged aluminum case.

Rotating Sample Cell

A closed glass bell with a detachable bottom holds a solid or liquid sample in the Dewar and also serves as the stirrer for the calorimeter system. The bottom of the cell is closed with a PTFE dish which fits snugly into the bell without requiring a gasket or sealing ring. Solid samples (up to 2 g) can be weighed directly into this dish before it is attached to the bell. Liquid samples (up to 20 mL) can be added to the closed cell from a pipette inserted through the top stem.



6755 Solution Calorimeter shown with 6772 Calorimetric Thermometer

Data Collection

With the 6755, the user is able to print to an attached printer, obtain weights from a balance, and transfer data to a computer as the system incorporates the 6772 Calorimetric Thermometer.

Standardization

The 6755 Solution Calorimeter is generally standardized using an exothermic reaction with TRIS. The instrument may also be standardized electrically with a heating probe or through comparison with known samples whose thermochemical behavior is understood.

6765 Combined Solution and Semimicro Calorimeter

For laboratories that want to perform both solution and semimicro oxygen bomb calorimetry tests, Parr offers the 6765 Combined Calorimeter. This includes the 6772 Calorimetric Thermometer plus a calorimeter module and conversion parts for both the 6755 Solution Calorimeter and the 6725 Semimicro Calorimeter.

6755 Solution Calorimeter Ordering Guide

Model No.	Voltage	Description
6755EA / EF	115 V / 230 V	6755 Solution Calorimeter
A274C	NA	Heating Probe (for electrical standardization, contact Parr technical support)
6765EA / EF	115 V / 230 V	Combined Solution and Semimicro Calorimeter
6729	NA	6729 Conversion Package 6755 to 6725