

# IKA

designed for scientists



## C 1 Package 1/10

/// Data Sheet

The C 1 static jacket oxygen bomb calorimeter represents a giant leap forward in calorimeter technology by featuring a high degree of automation in a compact design; the smallest calorimeter footprint available.

It operates according to DIN 51900 and ISO 1928. The temperature readings are analyzed according to the classical isoperibol method of Regnault Pfaundler.

The traditionally known, comparably heavy screw threaded decomposition vessel, has been replaced by a light and easily attachable combustion chamber.

Due to the variety of different interfaces (PC, balance, printer) this unit is easily adaptable depending on the customer's specific application needs. Further adaption to data management and LIMS is possible with our calorimeter software C



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6040 Calwin (Accessory).

The C 1 Package 1/10 contains the C 1 Calorimeter (inclusive standard combustion chamber C 1.10) and the cooling water supply unit RC 2 basic.

The unit contains all parts necessary to set up the unit. We also supply wear parts and consumables for the first approximately 500 experiments including 25 calibrations. The C 1.10 combustion chamber is equipped with the C 5010.5 large crucible holder and C 6 large quartz crucible.

## Technical Data

|  |                 |
|--|-----------------|
| Measuring range max. [J]                                     | 40000           |
| Measuring mode static jacket 22°C                            | yes             |
| Measuring mode static jacket 30°C                            | yes             |
| Measurements/h static jacket                                 | 4               |
| Reproducibility static jacke (1g benzoic acid NBS39i) [%RSD] | 0.15            |
| Working temperature [°C]                                     | 20 - 30         |
| Temperature measurement resolution [K]                       | 0.0001          |
| Cooling medium temperature [°C]                              | 18 - 29         |
| Cooling medium permissible operating pressure [bar]          | 1.5             |
| Cooling medium   | tap water       |
| Type of cooling  | flow            |
| Flow rate [l/h]  | 50 - 60         |
| Rec. flow rate at 18°C [l/h]                                 | 55              |
| Oxygen operating pressure max. [bar]                         | 40              |
| Interface scale  | RS232           |
| Interface printer  | RS232           |
| Interface PC   | RS232           |
| Oxygen filling   | yes             |
| Degasification   | yes             |
| Decomposition vessel integrated                              | yes             |
| Analysis according to DIN 51900                              | yes             |
| Analysis according to ISO 1928                               | yes             |
| Dimensions (W x H x D) [mm]                                  | 290 x 280 x 300 |
| Weight [kg]  | 15              |
| Permissible ambient temperature [°C]                         | 5 - 40          |
| Permissible relative humidity [%]                            | 80              |
| Protection class according to DIN EN 60529                   | IP 20           |
| RS 232 interface   | yes             |
| USB interface  | yes             |
| Voltage [V]  | 100 - 240       |
| Frequency [Hz]   | 50/60           |
| Power input [W]  | 120             |