

Isotech 510 Medusa |30°C to 550°C Calibrator

Isotech have a wide range of Dry Blocks to suit probes requiring a large immersion depth. These products feature large and deep calibration volumes. As such they are less portable than the earlier Dry Blocks, but have higher capacities and retain outstanding temperature uniformity, this uniformity is so good that these larger products are also apparatus for Secondary Laboratories to realize the Fixed Points of ITS-90. Medusa 510 has a maximum operating temperature of 550°C. The Medusa Model 511 can be used to 700°C and features three zone control. In addition to the main heating zone there are additional top and bottom heaters which compensate for the end losses creating a constant temperature zone across the well. For Comparison Calibration the Medusa should be used with an insert, the standard insert has six 8mm pockets 250mm deep. Also available is an insert 44mm diameter x 170mm deep which is suspended from the top of the block so that the height is user adjustable. For flexibility the Medusa can also be used with accessories for infrared thermometers and surface sensors. The Medusa is available in two models, the BASIC (B) and the SITE (S). The B model includes a sophisticated temperature controller with a dual display for Set Temperature and Dry Block Temperature. The S model includes a built-in digital thermometer to which an external standard thermometer can be connected giving greater accuracy, eliminating temperature gradient and loading errors. Also included in the site model is a timer which can set the bath between two temperatures, and automate ITS-90 fixed point operation. For Surface Sensor and Blackbody use an external thermometer is recommended. For laboratory accuracy the Medusa can be used with a high-end temperature indicator such as an Isotech TTI model. Includes as standard: Windows Software, Computer Interface and a Ramp to Set Point Feature. Increased resolution of ± 0.01 available throughout the range via the PC interface and from 0.01 to +99.99 locally on the autoranging front display. The controller features multi-point block to display correction giving good absolute accuracy. The S model has universal sensor input allowing Platinum Resistance Thermometers, Thermocouples (types K, N, R, S, L, B, PL2, T, J and E) along with Linear Process Inputs including 4-20mA current transmitters to be displayed on the in-built indicator. The indicator can be programmed with up to five calibration points to provide high accuracy digital probe matching. The indicator and controller are both addressable over the communications link.



Specifications

Details

Cools From

550°C to 30°C in 5 hours

| Specifications | Details |
|--------------------|---|
| Heats From | 30°C to 550°C in 90 minutes |
| Computer Interface | Included with Software |
| Indicator Units | °C, °F, K |
| Calibration Volume | 45mm diameter by 285mm deep |
| Standard Insert | Six 8mm pockets all 250mm deep |
| Stability | Metal Block Bath BlackBody Source Surface Sensor Calibrator ITS-90 Fixed Point |
| Brand | Isotech |
| Weight | 17kg |
| Overall Dimensions | Height 430mm, Width 310mm, Depth 300mm |
| Power | 108V to 130V or 208-240V 50/60Hz 1000 Watts |
| Temp Range | 30°C to 550°C |
| Display Resolution | (0.01) to 99.99 (0.1) 100.0 to 650.0 PC can display 0.01 across whole range with the software included. |

