



HC-10 Thermal Conductivity Tester

Technical Specifications

Portable thermal conductivity tester

Materials tested from top side

Measures thermal conductivity within 60 seconds

Wide range of materials (VIP to Metal)

Evaluation mode (Good / No Good)

The HC-10 is a portable thermal conductivity tester to quickly test the properties of insulating materials. As the total measurement time only takes 60 seconds, the HC-10 is a perfect solution for quick inspection of the thermal performance of various materials. The system consists of one probe which measures from the top side and can be utilized with different materials, VIP, Rubber, Ceramic, Glass and metals.

The HC-10 is based on the same principle as the HC-121; to check the performance (Good / No Good) of materials by measuring the thermal conductivity by means of surface area heat loss. This measurement method takes a very short time compared to traditional methods, and has a major advantage as only the top side needs to be measured for the evaluation of materials. The HC10 has a combined heat source and detector known as a sensing probe, which proportionally measures the heat loss through the detector and insulating material. In most common solutions, the test sequence takes more than 1 hour to

measure the thermal conductivity of 1 sample, the HC10 requires only 1 minute, which will shorten the production time of VIP drastically.

The HC-10 is a portable thermal conductivity tester, which can be used for VIP samples and other homogenous solid samples (e.g. Rubber, Plastics, Ceramic, Powder, Glass, Metals, etc.). The Evaluation mode (Good or No Good) is shown by on-screen display and LED indicator (class A, B or C). Up to 99 measurements can be stored in the HC10 for further evaluation. For comprehensive data evaluation and management, a PC can be connected to the HC-10 via USB (EKO software included).

The HC-10 is the optimal portable solution for on-site thermal conductivity checking of VIP Samples as well as other homogenous solid samples. It is suitable for a wide range of thermal conductivity applications including Quality Assurance, Production of VIP, Material Qualification, Material Research and



Development, etc.

As the HC-10 can only perform a relative measurement, the measurement probe needs to be calibrated by the customer using the built-in calibration procedure. In the case of VIP sample, 3 or 4 different thermal conductivity samples with the same material structure should be prepared by the user for calibration. In the case of other Homogeneous samples, 3 or 4 different standard samples are required. Standard samples of Glass, Acryl, EPS will be included with the HC-10.



| | HC-10 |
|--------------------------------------|--------------------------------|
| TC Measurement range | 1 - 5000 mW/mK |
| Measurement accuracy | +/- 5 % |
| Test Material Size | 150 - 760 mm |
| Test Material Thickness | 5 - 50 mm |
| Input channels max, 1 probe standard | 1 |
| Measurement time | 60 s |
| Operating temperature range | 5 - 40 °C |
| Data storage # | 99 |
| Measurement unit communication | USB |
| Dimensions mm | 200 (L) x 250 (W) x 90 (H) |
| Weight | 4 kg |
| Power supply (Power Adapter) | AC adapter 100-240VAC, 50/60Hz |

Specifications are subject to change without further notice.