BALAB 佰力博

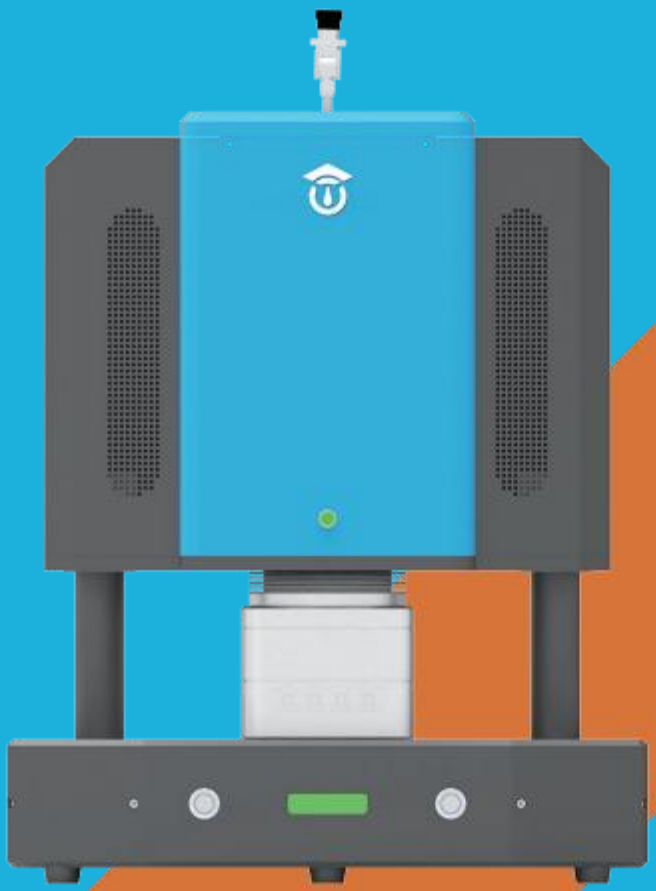
High-Temperature Dielectric TestingSystem

High Measurement Accuracy

Powerful Functionality

Excellent Repeatability

Integrated Disign



Overseas website: www.matmeas.com

Chinese website: www.balab.com.cn

Product Introduction

HTS1000DE system, through a process of meticulous refinement by dozens of Balab engineers and users - continuously adjusting, iterating and resolving challenges. We have arrived at a completely new definition of the high-temperature dielectric impedance spectrometer. The newly evolved system not only feature an upgraded electrode fixture measurement platform capable of testing both single and four bulk material samples, but also incorporates a sealed metal shielding heating system. This enhancement enables a wider range of testing environments, crafted to meet the deverse needs of scientific research.

Key Features

01 Incorporating thermal analysis design priciples, the furnace features a vertically downward-oriented chamber with a stationary fixture mechanism.

02 A built-in metal shielding minimizeds AC interference, ensuring enhanced measurement accuracy.

03 High-purity platinum electrodes are employed for high-temperature resistance, oxidation prevention and low contact resistance.

04 Each unit undergoes factory calibrationfor applied sample pressure (max. 0.25N), guaranteeing sample integrity throughout measurements.

05 The HTS software offers excellent compatibility, enabling unlimited expandability and application potential.

06 Real-time monitoring of temperature and heating curves allows for precise diagnostics of measurement anomalies.

07 The temperature sensor is positioned coplanar with the samples, ensuring accurate and direct temperature acquistion.

08 Factory calibration is performed using standard barium tianate ($BaTiO_3$) samples, ensuring reliable and stable temperature control during experiments.

09 The “Teaching & Service Link” feature introduces a new model for user training and after-sales support

10 An integrated design incorporates key measurement parameter by default, enabling optimal results in just five simple steps.

Parameter Category

Temperature Range：RT–800℃	Sample size：ϕ≤20mm，d≤5mm
Temperature Control Accuracy：±1℃	Electrode Material：Platinum
Heating Rate: 0–10℃/min （3℃/min typical）	Dimension：480x320x830mm(LxWxH)
Heating method：Resistance Wire Heating	Power Supply：220V/50Hz~60Hz，1600w
Frequency Range：10Hz~10MHz	Weight：46Kg
Measurement Enviroment：Air/ Flowing Gas/Vacuum	Warranty Period：1 Year