

Novotherm-HT

- Turn key high-temperature control system including temperature controller, furnace and 19" mounting rack.
- Temperature resolution: 0.1 °C
- Temperature range: from ambient to 1600 °C (Novotherm-HT 1600)
- Sample cell for high temperature tests under controlled atmosphere conditions like e.g. vacuum, inert gas, reactive gas, pH_2O , etc included.
- Fully supported by Novocontrol WinDETA control software via IEEE488 (GPIB) interface
- Fully supported by Novocontrol impedance analyzers Alpha, Beta, and Alpha-A (with test interfaces ZG2, ZG4, POT/GAL 30 V 2A, POT/GAL 15 V 10 A, HVB-300, HVB-1000, HVB-4000).



Novocontrol Technologies
GmbH & Co. KG
Aubachstr. 1
56410 Montabaur
Germany
Phone: +49 2602 9196690
Fax: +49 2602 91966933
e-mail: novo@novocontrol.de
web: <http://www.novocontrol.de>

Novotherm-HT



NOVOCONTROL

Novotherm-HT

The Novotherm is a high quality turn key high-temperature control system for applications in materials research. The system has been developed to set or change the temperature of the sample under test with high accuracy and reproducibility. The system is modular and may be combined with any Novocontrol dielectric or impedance analyzer.

The Novotherm temperature control system is designed to provide easy, safe and fully automatic operation, enabling computer-controlled long time experiments over several days without supervision.

Applications

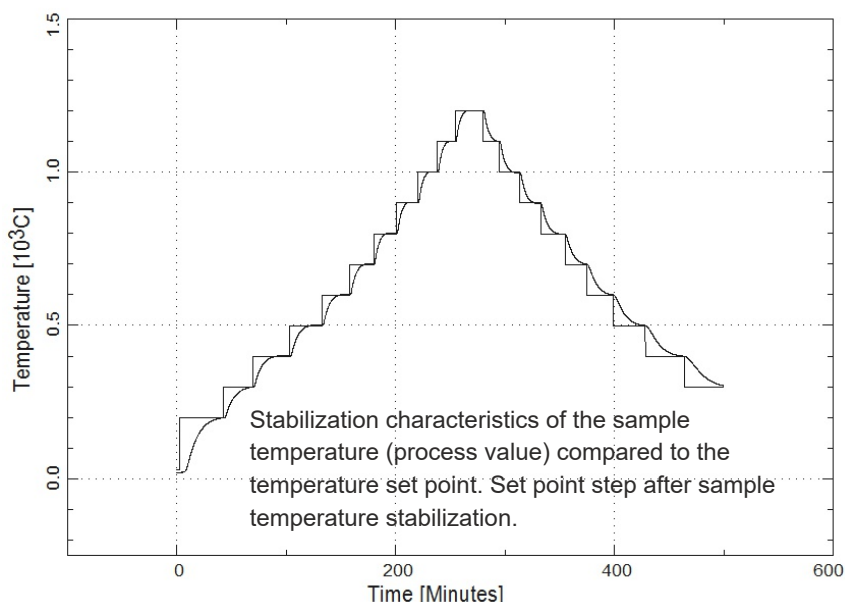
- Permittivity and conductivity measurements of materials vs T, pH₂O, etc;
- Fuel cell components testing
- Sensor testing
- Electrode kinetics
- Electrochemical pumping, gas permeation and electrocatalysis with gas analysis (e.g. GC or MS) on outlets
- Ionic transport numbers of membranes.



Novotherm-HT

Features

- High-temperature furnace with Pt/PtRh thermocouple
- High-temperature sample cell using Pt for electrodes/leads and aluminium oxide ceramic as structural/insulation material
- Sample temperature Pt/PtRh thermocouple
- Dual-channel cascade digital temperature controller with blended PID parameter sets for high/low temperature regions
- Three temperature control modes with dedicated PID parameter sets:
 - a) Regular sample control
 - b) sample control for operation with external metal shielding
 - c) furnace control
- Fast and highly reliable stabilisation, little overshoot.
- Temperature resolution: 0.1°C
- Control operation through sample temperature sensor
- Sample diameter up to 20 mm
- Sample thickness from 0 to about 5 mm
- GPIB/IEEE488 system interface



Model Options

The following models are available:

- Novotherm-HT 1200 (1200 °C)
- Novotherm-HT 1400 (1400 °C)
- Novotherm-HT 1600 (1600 °C)*

*230 V/32 A power line required

novoccontrol technologies