CESH

An innovative, multi-use sample holder for material characterization

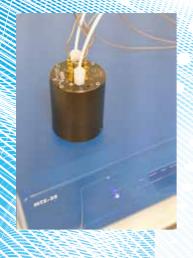


- -40 °C to 150 °C
- Easy sample mounting
- Variable controlled atmospheres
- Gas tightness up to 2 bar relative
- Compatible with temperature chambers



APPLICATIONS

- Electrical Impedance
- Dielectric constant / dielectric loss
- In-plane and through-plane conductivity
- Activation energy
- Phase transitions temperatures



The **Controlled Environment Sample Holder (CESH)** is a parallel plate sample holder dedicated to electrical characterization of flat material samples in the temperature range between -40 and 150 °C.

The CESH comes in two models: In-plane CESH and Through-plane CESH. The "Through-plane" model is dedicated to measurement of an electrical parameter in a direction perpendicular to that of the plane of the sample while the "In-plane" model is more dedicated to measurement of electrical parameter in a direction parallel to that of the plane of sample.

Electrodes

In-plane

- a standard electrode set (1)
- an interdigitated electrode set (2)







- 1 inch (1)
- ½ inch (2)
- 1/4 inch (3)







The body of the CESH acts as a Faraday cage which helps isolate the sample from electromagnetic noise. It can be handled in a glove box and placed in an Intermediate Temperature System (ITS) or in another temperature chambers.

Each CESH is equipped with a gas inlet/outlet for material testing in continuous flow mode or in static mode. It is leak-tight up to 2 bar relative. The CESH is offered with 4 cell cables (1.0 m) for connection to MTZ-35 and 4 cell cables (25.0 cm) for connection to a Bio-logic potentiostat. CESH is provided with four SMB connectors for 4-point measurements. It can also be used to perform 2-point measurements using MTZ-35 or a Bio-Logic potentiostat

SPECIFICATIONS

| Operating temperature range | - 40 to 150 °C |
|-----------------------------|-----------------------------------|
| Temp. accuracy | ±0.3 °C |
| Dimension | D 79 x H 94 mm (121.90 clearance) |
| Sample diameter | up to 27 mm |
| Sample thickness | up to 5 mm |
| Weight | 900 g |

Option

 Two PT-1000 Temperature probes

Compatible with

- Intermediate temperature System (ITS)
- MTZ-35 Impedance analyzer
- Bio-logic potentiostat/ galvanostat/FRA



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