CESH

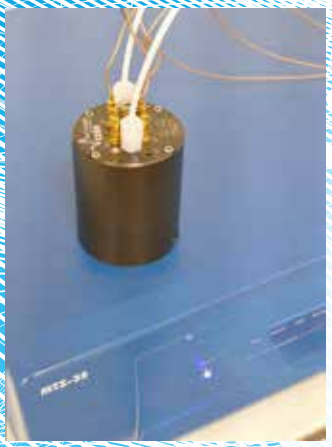
An innovative, multi-use sample holder for material characterization

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

BioLogic
Science Instruments

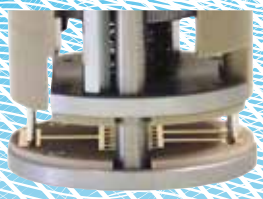
APPLICATIONS

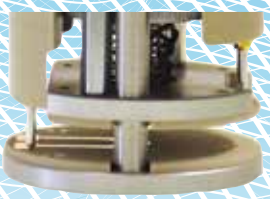
- Electrical Impedance
- Dielectric constant / dielectric loss
- In-plane and through-plane conductivity
- Activation energy
- Phase transitions temperatures



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.





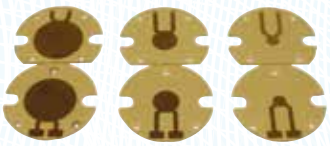
Electrodes

In-plane

- a standard electrode set [1]
- an interdigitated electrode set [2]

Through-Plane

- 1 inch [1]
- ½ inch [2]
- ¼ 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

Brochure released on December 2016 - Pictures and specifications subject to change

BioLogic
Science Instruments

Headquarters
Bio-Logic SAS
4, rue de Vaucanson
38170 Seyssinet-Pariset - France
Phone: +33 476 98 68 31
Fax: +33 476 98 69 09

www.bio-logic.net

Affiliate offices
Bio-Logic USA, LLC
P.O.Box 30009 - Knoxville, TN37930 - USA
Phone: +1 865 769 3800 - Fax: +1 865 769 3801

Bio-Logic Science Instruments Pvt Ltd
304,Orion Business Park, Next to Cine Wonder,
G. B. Road, Thane(W), 400 607 Mumbai - India