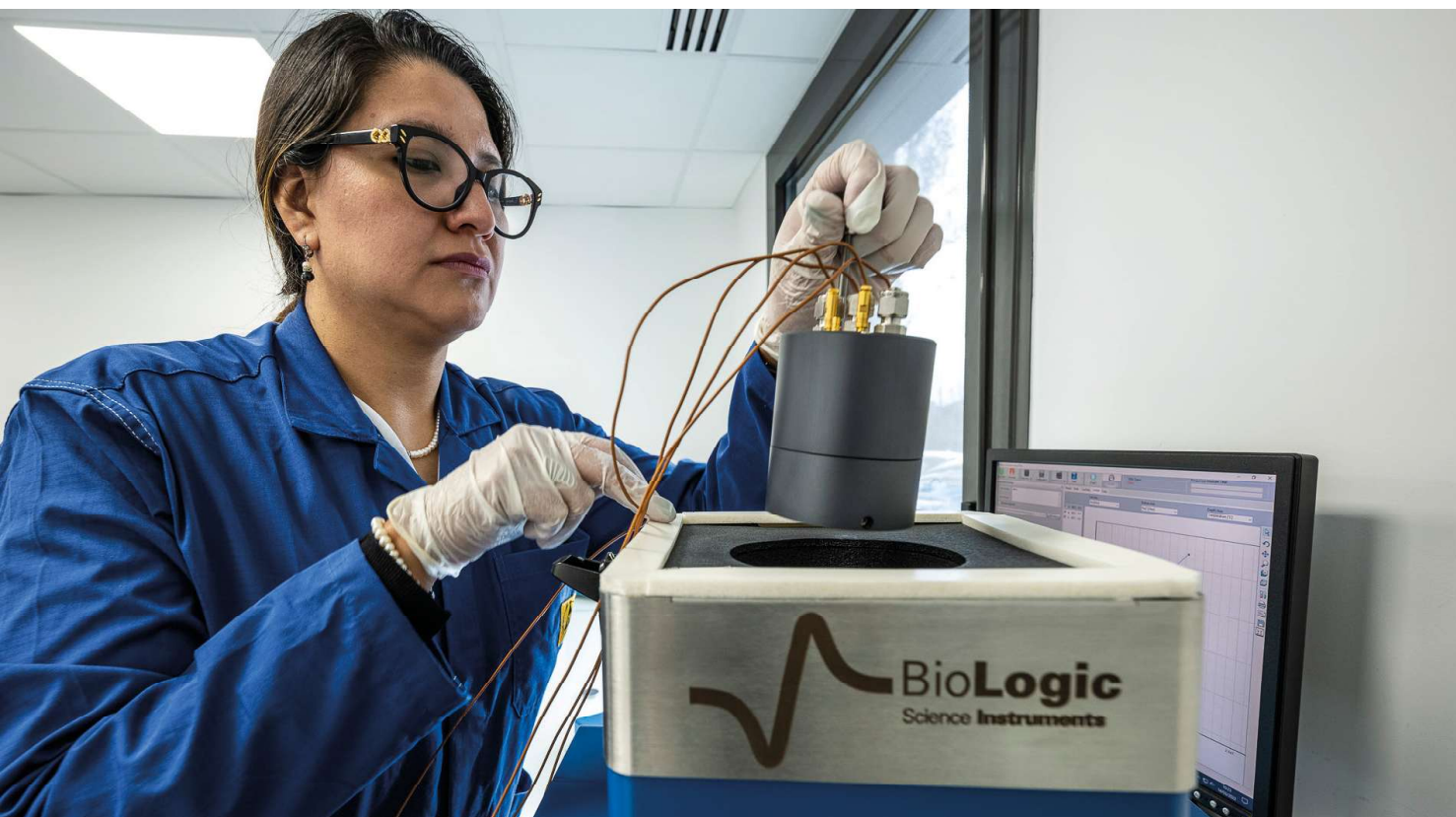


Temperature Control Unit.

Master sample temperature



ITS-e

A small-footprint benchtop temperature chamber

The intermediate temperature system allows accurate temperature control between -35°C and $+150^{\circ}\text{C}$. This is a good alternative to the larger conventional climatic chambers available on the market. Thanks to its small chamber, the temperature homogeneity is much better than in conventional chambers and leads to more reproducible measurements.

Application oriented

The ITS-e is dedicated to control the material's temperature for its electrical characterization. It can also be used for thermal curing and aging and for the determination of some kinetic or thermodynamic parameters like activation energy, phase transformation or glass transition temperatures.

Fully integrated and compatible with BioLogic products

The ITS-e is compatible with the MTZ-35 impedance analyzer and with BioLogic potentiostats. It allows users to easily set up their electrical and electrochemical experiments thanks to EC-Lab[®] or MT-Lab[®] software.



Specifications



	Information
Temperature range /°C	-35 to +150
Temperature accuracy /°C	± 0.3
Input voltage	115 V / 230 V, 50/60 Hz
Computer Interface	USB or Ethernet
Power consumption /W	250
Dimension /mm	400 x 313 x 385 (HxWxD)
Weight /kg	8
Catalog n°	
ITS-e	097-140e

CESH-e

A leak-tight sample holder for controlled atmosphere study

The Controlled Environment Sample Holder is a leak-tight (up to 2 bar relative) sample holder for the electrical characterization of hard, powdered, pasty and soft materials. Oxygen and moisture sensitive samples can be prepared in a glove box and then placed inside the CESH-e.

The CESH-e can be used as standalone, or inside an ITS-e or a climate chamber.

Constant contact pressure and thickness measurement

A thickness measurement kit including a micrometer head with a calibrated ratchet is provided as an option to ensure the accurate measurement of the thickness of the sample (ASTM D374). This also enables reproducible pressure (100 N or 6 N respectively) to study flexible and compressible materials.



	Information
Operating temperature /°C	-40 to 150
Max sample diameter /mm	30
Max sample thickness /mm	4
Core material	Anodized aluminum
Electrode material	Gold plated copper
Dimension /mm D 79 x H 94 mm	79x94 (Diameter x Height) 121.90 clearance
Residual capacitance with 20 mm diameter /pF	8
Weight /kg	0.9
To be used	Standalone or with ITS-e or climate chamber
Catalog n°	
CESH-e	097-150e
Thickness measurement kit	097-150e/10
Cable kit for CESH-e and MTZ-35	097-150e/01
Cable kit for CESH-e and Potentiostat	097-150e/02

Electrodes

Thanks to its modular electrodes setup, the CESH-e allows Through-plane and In-plane electrical measurements using interchangeable electrodes.



(Left) In-plane / (Right) Trough-plane

In-plane	Trough plane
097-150/IPSD (standard) (10 mm) 097-150/IP250 (250 µm) 097-150/IP100 (100 µm)	097-150/TP20 (20 mm diameter) 097-150/TP12 (1/2" diameter) 097-150/TP06 (1/4" diameter)