

INHECO
Industrial Heating & Cooling GmbH

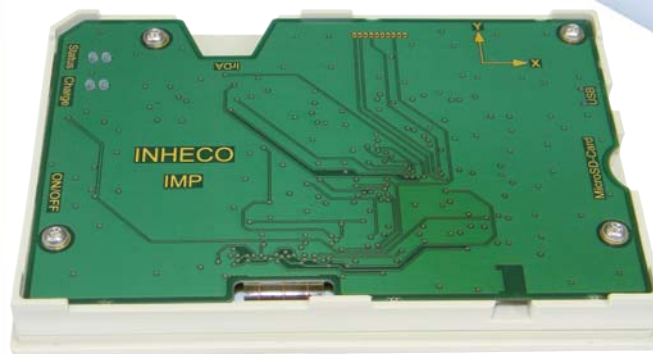
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This Datasheet can also be downloaded from our website. For further information, please contact our sales department.





Thermal Innovations and Products

INHECO Measurement Plate

► [Datasheet](#)

INHECO Measurement Plate (IMP)

Product Description

The IMP is a compact and precise measurement tool in SBS format for verifying the temperature, relative humidity or shaking performance of INHECO's heating, cooling, incubation and shaking devices used in LabAutomation applications.

The cordless design allows a flexible use of the IMP, even measurements in closed systems, e.g. incubators are possible. The IMP can be handled by all common gripper systems which gives the opportunity to automate the whole verification / validation process. 10 built-in temperature sensors guarantee the seamless monitoring of the temperature distribution over the whole surface area, a three-axis acceleration sensors determines the shaking speed and amplitude.

The measurement data are stored on an internal EEPROM and can be transferred via USB or built-in IrDA interface to an external PC for evaluation and analysis. The IMP is equipped with a µSD memory card for additional data storage and for an alternative data transfer option between the IMP and the computer. The temperature and shaking data can be exported in csv format for customized evaluation or transferred into the INHECO evaluation software for a standard evaluation.

The measurement profile can be easily pre-adjusted for each run, by connecting the IMP via interface to the INHECO IMP software. Parameters like "measurement duration", "scan interval for sensors", etc. can be set and adjusted individually.



7901000: INHECO IMP

Scope of delivery

The IMP can be ordered with a pre-calibration done by INHECO or with NIST / DKD calibration of the temperature sensors.

The basic temperature evaluation software is included in the IMP package. For advanced temperature and shaking performance analysis, the full IMP evaluation software is recommended.

The standard IMP comes with a flat bottom contact surface. Adapters for other formats, e.g. 96 well PCR plate, are available on request.

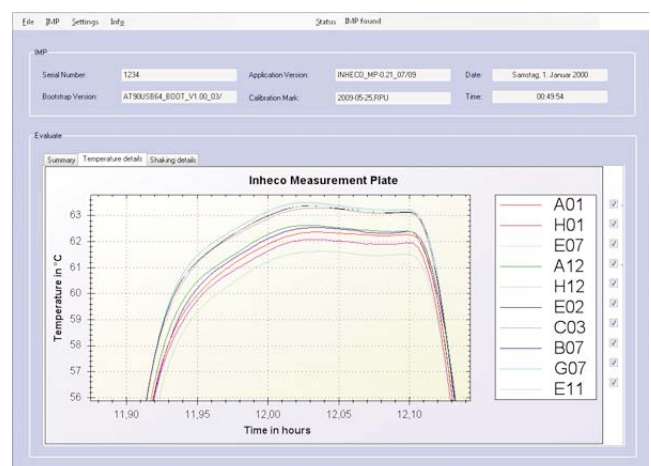


7300013 Incubator Shaker with 7901000 IMP

Product	Article No.	Dimension W x D x H (mm)	Weight (kg)	Temp.Range	RPM Range
IMP	7901000	85,7 x 128 x 14,9	0,102 kg	0°C to 60°C	240 - 2.400 rpm

IMP Evaluation Software

In order to maximize the performance of the IMP, INHECO offers a powerful analysis software tool to verify and validate a broad range of temperature and shaking settings. Test units of the IMP are available on request.



Main Specifications

Specification	7901000
Interface	USB (1.1 / 2.0), IrDA
Number of temperature sensors	10
Relative humidity	0%-100% (± 2,0%)
Ambient temperature	15°C to 32°C
Amplitude (min-max)	0-20mm
Accuracy amplitude	± 10%
Accuracy RPM	ca.1%
Max. # measurement points (without SD)	10.000
Run-time battery in operation*	20 h.

* at ambient temperature

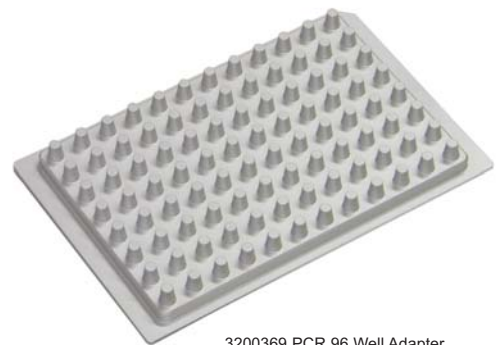
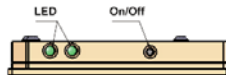
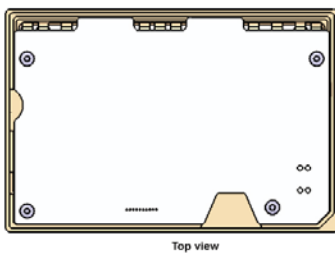
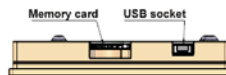
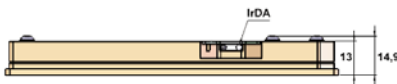
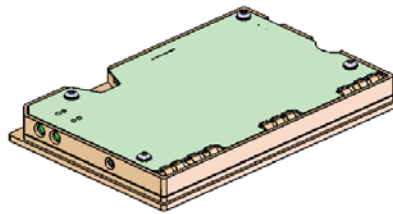
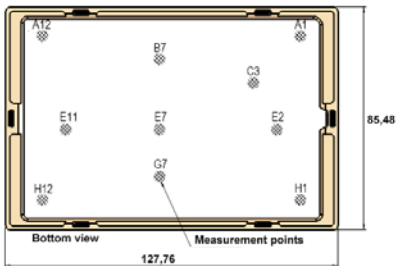
Temperature precision (calibrated)	± 0,1°C
Temperature precision @60°C on Flat Bottom**	± 0,3°C
Temperature accuracy (calibrated)	± 0,1°C
Temperature accuracy @60°C on Flat Bottom**	± 0,8°C

** measured at 60°C on a Flat Bottom Adapter with a CPAC unit



7901000 IMP with CPAC Ultraflat

Drawings



3200369 PCR 96 Well Adapter

Accessories & Related Products

Product	Article No.	Product	Article No.
96 Well PCR Adapter	3200369	IMP Calibration NIST/DKD	7901002