

HETTCUBE RANGE

Warm for your samples,
cool for the climate





MODEL	HettCube 200	200 R	HettCube 400	400 R	HettCube 600	600 R
Temperature range for incubators / cooled incubators	1 K above ambient temperature up to +65 °C / 0 °C to +65 °C					
Exterior dimensions (without bushing and door handle) W x D x H in mm	710 x 825 x 970		710 x 825 x 1425		710 x 825 x 1990	
Interior dimensions W x D x H in mm	535 x 690 x 420		535 x 690 x 850		535 x 690 x 1415	
Internal volume in litres	150		310		520	
Valid. usable volume as per DIN 12880:2007-05 in l	82		199		351	
Percentage valid. usable volume / internal volume	54 %		64 %		67 %	
Footprint in m ²	0.6		0.6		0.6	
Weight in kg	92	103	117	128	164	175
Number of trays provided as standard	2 (1 standard + 1 HTS)		3 (2 standard + 1 HTS)		4 (3 standard + 1 HTS)	
Temperature fluctuation at +37 °C			± 0.1 K			
Temperature uniformity at +37 °C			± 0.2 K			
Temperature uniformity at +25 °C			± 0.1 K			
Recovery time after door has been opened for 30 sec at +37 °C	≤ 3 min		≤ 4.5 min		≤ 5.5 min	
Energy consumption at +37 °C	0.033 kWh		0.043 kWh		0.049 kWh	
Noise level	≤ 41 dB(A)	≤ 44 dB(A)	≤ 41 dB(A)	≤ 44 dB(A)	≤ 41 dB(A)	≤ 44 dB(A)
Power supply	220 – 240 V 1 ~ / 50 – 60 Hz					
Cat. No.	62000	62005	64000	64005	66000	66005

OTHER VOLTAGES	Cat. No.					
120V 1 ~ / 50 – 60 Hz	62000-01	62005-01	64000-01	64005-01	66000-01	66005-01
110V 1 ~ / 50 – 60 Hz	62000-03	62005-03	64000-03	64005-03	66000-03	66005-03
100V 1 ~ / 50 – 60 Hz	62000-04	62005-04	64000-04	64005-04	66000-04	66005-04
127V 1 ~ / 50 – 60 Hz	62000-05	62005-05	64000-05	64005-05	66000-05	66005-05
Weight in kg*	97	108	122	133	169	180
Energy consumption at +37 °C*	0.04 kWh		0.05 kWh		0.06 kWh	
Noise level*	≤ 42 dB(A)	≤ 44 dB(A)	≤ 42 dB(A)	≤ 44 dB(A)	≤ 42 dB(A)	≤ 44 dB(A)

* All other data are the same as for the product versions with standard voltage (220 – 240 V 1 ~ / 50 – 60 Hz).

All temperature values were ascertained at an ambient temperature of +22 °C in accordance with DIN 12880:2007-5. The data apply for incubators with standard features.

ALL BENEFITS AT A GLANCE

More benefits for you.

The most important advantages of our three models are presented below. HettCube incubators will cater for all your requirements. See for yourself and save money. At an operating temperature of 37 °C a HettCube incubator consumes less than 0.05 kWh.



PROTECT THE ENVIRONMENT

HettCube incubators can also operate at a temperature 1 K above a stable ambient temperature. This allows a HettCube incubator to be used without cooling in situations in which incubators from other manufacturers must have cooling.



SAVE SPACE

The door does not require space at the side to open. This means that the incubator can be positioned in a corner or close to other lab equipment. The door hinges can easily be moved from one side of the incubator to the other.



PROVIDE PROTECTION

The practical door-locking mechanism locks both the door and the control panel at the same time. This prevents inadvertent changes to parameters and harmful effects on cultures.



PREPARED CONNECTION

One bushing on the rear panel is provided as standard.



MOBILE STABILITY

The HettCube 400 and 600 models have castors for moving them to the desired position. Once in position they can be fixed with adjustable feet.



CLOSING BY ITSELF

A HettCube incubator will close automatically at an opening angle below 90°. A magnetic mechanism assists this automatic closing.



EASY CLEANING

The internal lining, drawers and shelves are made of stainless steel and can be readily removed for thorough cleaning and autoclaving.



UNIMPEDED ACCESS

Loading and unloading of the incubators is much easier because there is no inner door. Optional shelves and drawers run on telescopic rails and can be pulled out up to 70 %.



SAFE GRIP

Rounded grips on the standard shelves keep your gloves safe from ripping.

REMARKABLY QUIET

The fan is located outside the usable space. So HettCubes generate a remarkably low noise level of ≤ 44 dB(A).

HIGH-QUALITY EQUIPMENT

Each HettCube comes with an HTS tray with telescopic rails as a standard feature.

PERFECT CONDITIONS

Temperature control principle

- Constant temperature.**
- Homogeneous temperature distribution.**

Our guardians of culture: the HettCube range combines the advantages of natural and forced convection. The fan is housed outside the usable space, so that there is a low air flow inside the incubator. The temperature is maintained by radiated heat, preventing the formation of hot spots. Cultures do not dry out and the conditions inside the incubator are the same at all points, helping to deliver reproducible results. This sophisticated air circulation system, along with the good insulation, makes an inner door unnecessary.



Validated usable volume

Up to 67 % of the interior space is validated usable volume as per DIN 12880:2007-05.

In the laboratory every centimetre counts. For this reason, we decided against a strong air flow, which achieves validated temperature homogeneity in only 50 % of the interior space, and opted for gentle air flow. This, along with our highly efficient, space-saving insulation, allows you to benefit from a maximum validated usable volume and a minimum footprint.

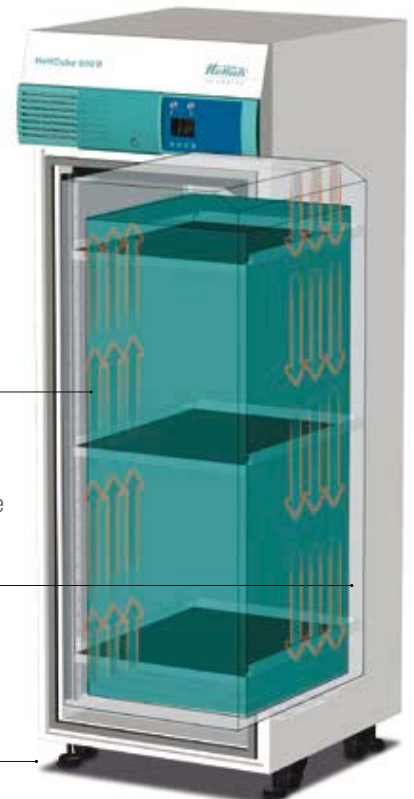
MODEL	200 / 200 R	400 / 400 R	600 / 600 R
Internal volume in litres	150	310	520
Validated usable volume in litres	82	199	351
Percentage of validated usable volume in the interior	54 %	64 %	67 %

Interior
Validated usable volume according to DIN 12880:2007-05

Gentle air flow: large validated usable volume. Guaranteed temperature homogeneity according to DIN 12880:2007-05.

Space-saving high-performance insulation provides additional usable interior space.

Small footprint.

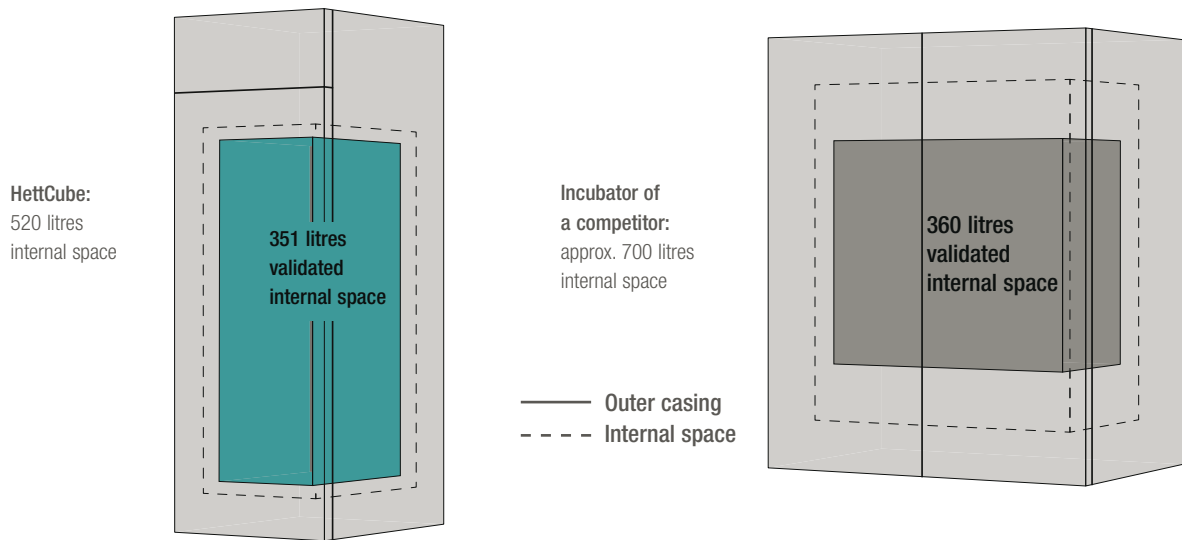


VALIDATED USABLE VOLUME

What really counts:

Only the validated usable volume in an incubator can guarantee homogenous temperature distribution for the cultures and therefore reliable results. However, a large internal space does not necessarily mean that the validated

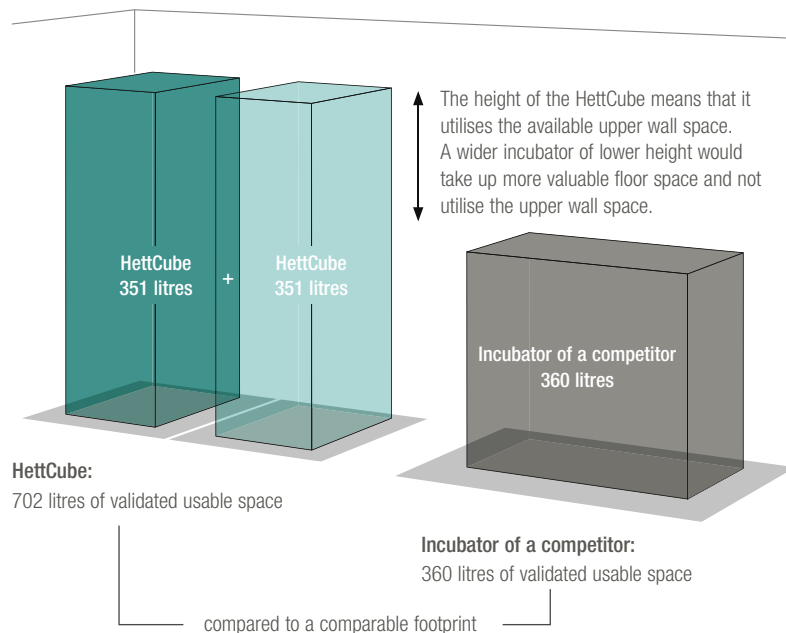
usable space is large. For a given size, HettCube models offer 20-30 % more validated usable space than other incubators.



Almost TWICE as much usable volume on the same footprint

For the same footprint, HettCube incubators offer 85 % more usable space, since two HettCube units fit into a

space that is only slightly greater than that occupied by a single unit of a competitor.



A HettCube incubator brings cost savings:

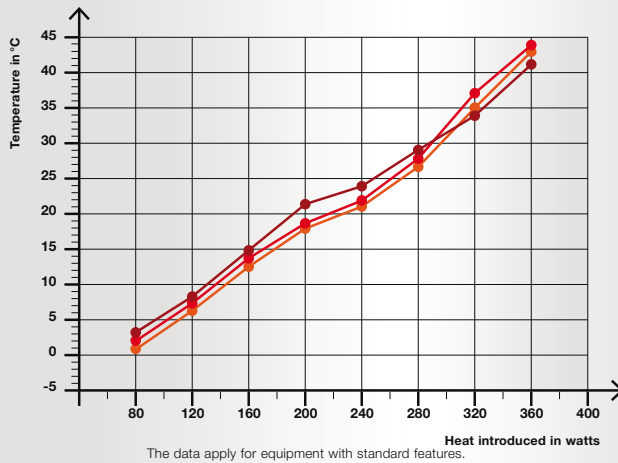
HettCube	Competitor
Gentle air flow + High-performance insulation + Small footprint =	Strong air flow + Bulky insulation + Large footprint =
Maximum loading capacity + cost savings per m ² laboratory space	Low loading capacity + higher costs per m ² laboratory space

PRACTICAL ACCESSORIES

Reliable compensation of temperature differences between the inside and outside

Heat compensation of the HettCube 200 R/400 R/600 R

Lowest attainable temperature values upon introduction of equipment with different heat outputs.



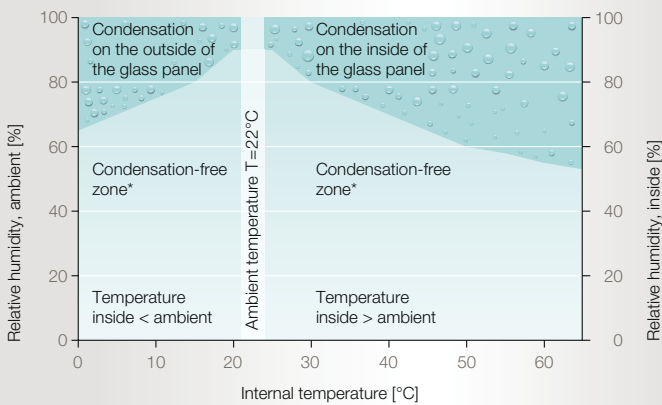
HettCube models react to changes in ambient conditions. Temperature fluctuations outside the incubator and energy introduced into the usable space by external equipment are compensated for immediately and actively.

- Temperature HettCube 200 R (0 °C to +65 °C)
- Temperature HettCube 400 R (0 °C to +65 °C)
- Temperature HettCube 600 R (0 °C to +65 °C)

HettCubes with glass door

The glass door enables users to check on their cultures without opening the door. The contents of the incubator can be easily reached since there is no additional inner door. The well-conceived air-guiding system makes this possible.

Condensation diagram for HettCubes size 200 / 400 / 600 with glass door at an ambient temperature of +22 °C



*Condensation possible in the boundary areas



Glass door for 600 and 600R

Cat. No. 60013

Hettich Tray System (HTS)

The Hettich Tray System, which fits in all three incubator sizes, allows the internal space of the HettCube to be used optimally. The trays, drawers, holders and rails are separate components. You just hang the rails in the grids of the holders and put in the tray or drawer of your choice.

Purchase information is provided on page 198.



The advantages

- **Ideal grid dimensions**
The holders for the rails are placed to make optimum use of the internal space.
- **Standardised frame**
HTS trays and drawers are interchangeable. They fit in any HettCube.
- **Seal-welded drawers**
Liquids cannot drip to the floor.
- **High-quality stainless steel**
All of the components can be autoclaved in case of contamination.
- **Tray pulls out up to 70 %**
Telescopic rails make it easy to work and permit use of the entire surface area. Even samples that are way in the back can be easily reached. HTS trays and drawers can be inserted and removed almost horizontally.
- **Rugged pull-out mechanism**
External equipment like the Hettich HSM 10 orbital shaker can be loaded and unloaded with no trouble. A fixation kit (Cat. No. 60919) which additionally dampens the shaker movement in the cabinet is supplied at no charge.



HettCube 400 R shown with glass door and a Hettich HSM 10 shaker

PRACTICAL ACCESSORIES

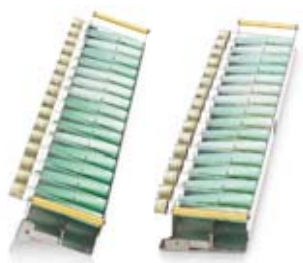
Hettich-Rack_L and Hettich-Rack_{XL} (Löwenstein) for 16 tubes³⁷⁾

These flexible racks simplify handling, save time and enable the use of

- tubes of different diameters (15 - 20 mm)
- tubes of different lengths (100-125 mm or 126-170 mm)

- different slant angles³⁸⁾ (5° or 20°).
The slant angle of the tubes can be very easily changed without the need for tools.

The racks are of high-quality stainless steel and can be autoclaved.



Hettich-Rack_L
for tubes of length 100 -125 mm, handle of gold colour

Cat. No. 60027



Hettich-Rack_{XL}
for tubes of length 126 -170 mm, handle of champagne colour

Cat. No. 60028

Hettich orbital shaker (HSM 10) sets to fit in Hettich incubators with and without cooling³⁷⁾

The robust metal casing of the shaker enables it to withstand temperatures up to +65 °C and ensures a long service life. It is available with different platforms depending on the microbio-

logical application. Each combination of shaker and platform is a complete unit.

Technical Data HSM 10

- Shaking frequency: 50-250 RPM
- Max. load: 10 kg
- Dimensions (W x D x H):
410x595x140 mm
- Timer



HSM 10 (set 1)
including the universal platform
(5 tension rollers) for different vessels

Cat. No. 60905



HSM 10 (set 2)
including platform (antislip mat)
for a wide range of containers

Cat. No. 60906



HSM 10 (set 3)
including platform for Erlenmeyer flasks,
with a set of 18 clamps of different sizes

Cat. No. 60907

³⁷⁾ More information is available from info@hettichlab.com or can be downloaded from our website www.hettichlab.com

³⁸⁾ The slant of the agar increases the surface area available for growth. It is necessary to use test tubes to hold the agar for micro-organisms that grow very slowly to avoid the cultures drying out.

Standard features

- RS 485/422 interface
- Microprocessor controller with program functions: Protection against temperatures above or below the set value. Temperatures can be set with an accuracy of 0.1 °C.
- Potential-free alarm output
- Acoustic and visual alarms
- Temperature selection monitor class 3.1
- Bushing on rear panel
- Control panel and door lockable simultaneously
- Interior of high-quality stainless steel (W-St 1.4301 (ASTM 304))
- One HTS tray (with telescopic rails)
- Factory certificate based on the Hettich QM system, mean value of 9 measurement points as per DIN 12880:2007-05 at 37 °C



Options and features

Customise your HettCube model to suit your individual requirements. The optional Hettich components satisfy the same high quality requirements as the incubators.

	Cat. No.
USB converter incl. connecting cable and software for programming and recording (60901)	60501
Ethernet converter incl. connecting cable and software for programming and recording (60901)	60502
Software for programming and recording data for a HettCube incubator for up to 60 days	60901
Independent, flexible PT 100 sensor (4-wire) with 4 – 20 mA analogue output on the rear panel, with external alarm monitoring for recording temperature in the event of a power failure (LIM compatible)	60503
Independent, flexible PT 100 sensor (4-wire) with 4-pole connection on the rear panel (LIM compatible)	60504
Object temperature display with flexible PT 100 sensor (4-wire), with data logging by Hettich software	60505
EU internal socket outlet IP 54, max. load 400 watts	60511
US internal socket outlet NEMA 5-15 R, IP 54, max. load 400 watts	60508
UK internal socket outlet BS 1363, IP 54, max. load 400 watts	60509
CH internal socket outlet SEV 1011, IP 54, max. load 400 watts	60510
Additional internal socket outlet for an electrical unit to connect to one of the main socket outlets (60508 – 60511). Max. 5 socket outlets per HettCube model (including the main one).	60520



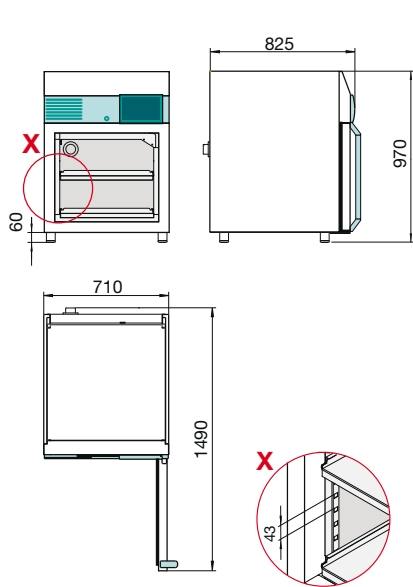
Options and features

	Cat. No.
Bushing on the left side of the incubator, Ø 22 mm	60006
Bushing on the left side of the incubator, Ø 42 mm	60007
Bushing on the left side of the incubator, Ø 67 mm	60008
Stacking kit, for safe stacking of two HettCube 200 or 200 R models on top of each other	60009
Tray of stainless steel with guide rails of stainless steel (standard tray)	60001
HTS tray of stainless steel with telescopic rails, pulls out up to 70%, max. load 40 kg	60031
HTS drawer of stainless steel with telescopic rails, pulls out up to 70%, max. load 40 kg, height 30 mm	60024
HTS drawer of stainless steel with telescopic rails, pulls out up to 70%, max. load 40 kg, height 65 mm	60025
HTS drawer of stainless steel with telescopic rails, pulls out up to 70%, max. load 40 kg, height 105 mm	60026
Separate interlocking of the control panel	60014
Glass door for HettCubes size 600	60013
Glass door for HettCubes size 400	60029
Glass door for HettCubes size 200	60030
Hettich-Rack _L for tubes of length 100-125 mm	60027
Hettich-Rack _{XL} for tubes of length 126-170 mm	60028
Hettich orbital shaker HSM 10 (set 1) incl. universal platform with 5 tension rollers	60905
Hettich orbital shaker HSM 10 (set 2) incl. antislip mat	60906
Hettich orbital shaker HSM 10 (set 3) incl. platform for Erlenmeyer flasks (incl. 18 clamps)	60907
Rolling cabinet for a HettCube 200 or 200 R model	60010
Rack for Petri dishes	60040
Rack for Petri dishes with standard rails	60039
Rack for Petri dishes with telescopic rails	60038

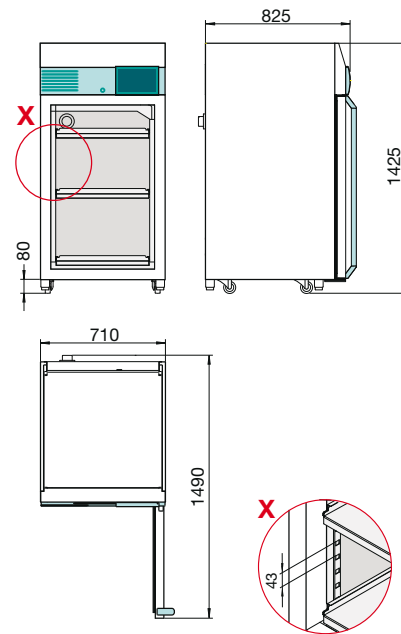


Other options on request.

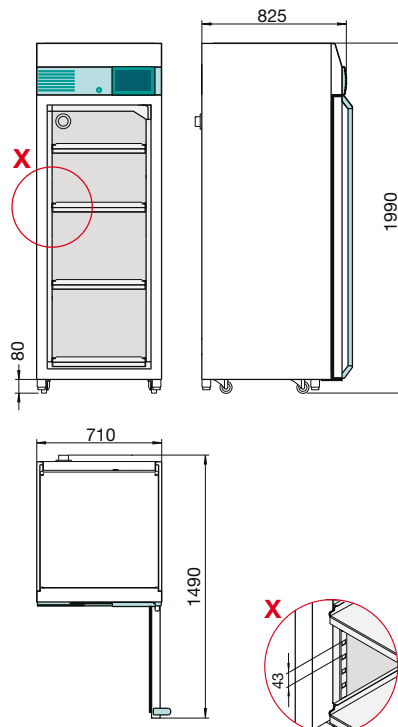
HettCube 200/200 R



HettCube 400/400 R



HettCube 600/600 R



All dimensions in mm