INCUBATORS

Efficient use of valuable space

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09

THE NEXT HETTCUBE GENERATION

Now with touchscreen and more options

With the new touch screen, HettCube incubators and cooled incubators guarantee intuitive operation with flexible and individual setting options and many new features. The proven combination of natural and forced convection ensures stable and homogeneous temperatures in a much larger part of the interior than conventional incubators. This offers you up to 30% more validated useful space with the same interior space. In addition, the high design of the HettCube incubators requires up to 50% less floor space with comparable capacity.

FEATURES

- Maximal validated usable space on a small footprint
- One-hand operation without additonal inner door
- 4.3 inch touch display for intuitve operation
- Automatic door closure with magnetic seals, door orientation can be easily changed
- Low noise level of ≤ 44 dB(A)
- TÜV certified and factory certificate HettCert with 9 measuring points according to DIN 12880:2007-5 standard
- HettCube without cooling requires only 1°K (1 °C) above stable ambient temperature
- Models with IVD approval
- Inclusive up to 3 standard shelves and 1 HTS shelf with telescopic rail

Additionally for cooled models:

- Temperature drop with holiday function
- Temperature selection monitor class 3.2

FIELDS OF APPLICATION

- Microbiological laboratories
- Hospital
- Pharmaceutical laboratories
- Food analyzing laboratories
- Scientific laboratories in universities
- Cosmetic industry
- Food and beverage
- Agricultural industry
- Life science

IVD CONFORM according to directive 98/79/EC*

DIN EN ISO 9001 HettCert DIN EN ISO 13485

* also available without IVD

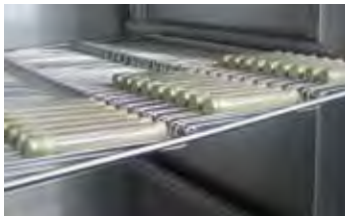
TECHNICAL DATA

	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 up to +65 °C	1 K above ambient temperature up to +65 °C 0 °C up to +65 °C	1 K above ambient temperature up to +65 °C 0 °C up to +65 °C
Exterior dimensions (without access port and door handle) W x D x H in mm	710 x 825 x 970	710 x 825 x 1425	710 x 825 x 1,990
Interior dimensions W x D x H in mm	535 x 690 x 420	535 x 690 x 850	535 x 690 x 1,415
Internal volume in liters	150	310	520
Validated usable volume in liters	82	199	351
Percentage validated usable volume / internal volume	54 %	64 %	67 %
Footprint in m²	0.6	0.6	0.6
Weight in kg	92 | 103	117 | 128	164 | 175
Number of shelves 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	± 0.1 K	± 0.1 K
Temperature uniformity at +37 °C	± 0.2 K	± 0.2 K	± 0.2 K
Temperature uniformity at +25 °C	± 0.1 K	± 0.1 K	± 0.1 K
Recovery time after door has been opened for 30 s at +37 °C	≤ 3 min	≤ 4.5 min	≤ 5.5 min
Energy consumption at +37 °C	0.038 kWh/h	0.046 kWh/h	0.056 kWh/h
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	220 – 240 V 1 ~ / 50 – 60 Hz	220 – 240 V 1 ~ / 50 – 60 Hz
Cat. No.	**62000 | 62005**	**64000 | 64005**	**66000 | 66005**
Non-IVD version	62001 | 62006	64001 | 64006	66001 | 66006
Other voltages			
100-120 V 1 ~ / 50 – 60 Hz	62000-01 | 62005-01	64000-01 | 64005-01	66000-01 | 66005-01

MORE OPTIONS AND ACCESSORIES

Switchboard

Rack for petri dishes



Rack for Loewenstein application

	Cat. No.
Shelf (Set) I Made of stainless steel, with standard rails, max. load (kg): 50	60001
Shelf (HTS-Set) I Made of stainless steel, with telescopic rails, extendable up to 70 %, max. load (kg): 40	60031
Drawer (HTS-Set), High 30 mm I Made of stainless steel, with telescopic rails, extendable up to 70 %, tightly welded, max. load (kg): 40	60024
Drawer (HTS-Set), High 65 mm I Made of stainless steel, with telescopic rails, extendable up to 70 %, tightly welded, max. load (kg): 40	60025
Drawer (HTS-Set), High 105 mm I Made of stainless steel, with telescopic rails, extendable up to 70 %, tightly welded, max. load (kg): 40	60026
Rack (HTS-Set) I For Petri dishes, stainless steel, with telescopic rails, extendable up to 70 %, Petri dishes Ø (mm): 90, max. load (pcs): 90	60038
Rack (Set) I For Petri dishes, stainless steel, with standard rails, Petri dishes Ø (mm): 90, max. load (pcs): 90	60039
Rack I For Petri dishes, stainless steel, Petri dishes Ø (mm): 90, max. load (pcs): 90	60040
Rack (HTS-Set) I For inclined storage of cultures (Loewenstein), stainless steel, with telescopic rails, extendable up to 70 %, inclination angle: 5°, tube Ø (mm): 15-20, max. load (pcs): 81tube	60036
Rack (Set) I For inclined storage of cultures (Loewenstein), stainless steel, with standard rails, inclination angle: 5°, tube Ø (mm): 15-20, max. load (pcs): 81 tubes	60037
Rack I For inclined storage of cultures (Loewenstein), stainless steel, inclination angle: 5°, tube Ø (mm): 15-20, max. load (pcs): 81 tubes	60041
Frame L, 16-place I Made of stainless steel, for inclined storage of cultures, tube Ø (mm): 15-20, Tube length (mm): 100-125, inclination angle 5° or 20 °	60027
Frame XL, 16-place I Made of stainless steel, for inclined storage of cultures, tube Ø (mm): 15-20, Tube length (mm): 126-170, inclination angle 5° or 20 °	60028
Switchboard I 4-fold socket strip, as a unit controllable via display, on the back of the device	60521
Independent PT 100 sensor I For independent temperature measurement, four-wire system, temperature values output with analogue output 4-20 mA on the back of the device	60503
Passive dehumidification I For individual or timed opening of a dehumidification module via the touchscreen	60042
Service: Assembly of the Stacking kit for the HettCube 200 I 200 R	60043
Service: Changing the door hinge	60044
Glass door I All-glass outer door, for HettCube 200 I 200 R	60030
Glass door I All-glass outer door, for HettCube 400 I 400 R	60029
Glass door I All-glass outer door, for HettCube 600 I 600 R	60013
Access port I Ø (mm): 22, Foam stoppers	60006
Access port I Ø (mm): 42, Foam stoppers	60007
Access port I Ø (mm): 67, Foam stoppers	60008
Stacking kit I For safe stacking of two HettCubes 200 I 200 R	60009
Rolling cabinet I Lockable, with one drawer, incl. lockable castors, WxDxH (mm): 770x800x550, for HettCube 200 I 200 R	60010
USB Port Lock (Set) I For securing the USB-A interface. Set consisting of 10 securing clips and 1 USB key tool.	60525
Parameter for continuous cooling operation I For storing samples below 15 °C for more than 2 weeks	60526

EXTENSIVE STANDARD EQUIPMENT

4.3 inch touchscreen


Shelf (HTS-Set) with telescopic rails


Access port on rear panel Ø 42 mm

4.3 inch touchscreen:
- Target / actual display
- Setting accuracy 0.1 ° C
- Real-time calendar
- Timer
- Language options (English, German, French and Spanish)
- Temperature diagram in 3 zoom levels (up to 4 weeks)
- Power failure scenarios
- Door alarm individually adjustable
- Log (door openings, alarms and operating hours)
- PIN lock
- Up to 99 program functions (Start/Stop, Period, Timer at start, Timer at temperature, ...)
- Temperature selection monitor class 3.1 for all models

Additionally with refrigerated devices
- Temperature reduction with holiday function
- Temperature selection monitor class 3.2 for all refrigerated models
- Programming external devices via switchboard (option)

Control panel and door lockable simultaneously

USB service interface

Bushing on rear panel Ø 42 mm

Potential-free alarm output

Interior of high-quality stainless steel (W-St 1.4301 (ASTM 304))

In addition you get for free ...

Up to 3 Shelf standard shelves of stainless steel (depending on model size)

HTS shelf of stainless steel with telescopic rails

Factory certificate (HettCert) – 9 points measurement analog to DIN 12880: 2007-05

Rebates available for unused shelves*

* Choose other shelves / drawers as standard, we credit you the price of unused standard inserts.

EVERYTHING UNDER CONTROL

INTUITIVE OPERATION WITH THE NEW TOUCHSCREEN

Get clear and concise information on your incubation process – at a glance! With the new 4.3 inch touchscreen and intuitive menu dashboard, you can easily view the status of the device, as well as any alarms and events in the past 4 weeks. Any event or irregularity (such as door openings, tolerance band violations or power failures) are electronically documented in the logbook.

EASY WEEKLY PROGRAMMING

The user-friendly touchscreen allows for uncomplicated adjustment of weekly programming without additional software – directly on the device. The holiday function allows you to define additional temperature drops for your days off already months in advance. Easily determine the start time or the time period as well as the frequency of your Temperature reduction in a real-time calendar.

SAFETY FOR YOUR SAMPLES

FLEXIBLE SETTINGS

Various events and alarm functions are individually adjustable. For example: Deviations from the interior temperature can be limited individually over tolerance range limits or fixed via independent temperature safety device of Classes 3.1 and 3.2. Class 3.2 is already included in the standard version of all refrigerated HettCubes.

PROCESS RELIABILITY EVEN IN THE EVENT OF A POWER FAILURE

With the new HettCube generation, you can keep control over your samples even in the event of a power failure. Define by yourself two different settings options how your HettCube‘s should behave in the event of a power failure.

Setting the period
By default, the device automatically restarts at the point where the power failed. But Users can also define the acceptable length of time in the event of a power failure. Once power is restored, the HettCube will verify whether this pre-set period has been exceeded. Should this be the case, the settings will be paused and the incubator will automatically move to a Standstill (Safe) Mode. Otherwise, the unit will continue with normal operation and user settings.

Setting the tolerance band
Tolerance band limits and holding temperature are individually configurable. After a power failure, the HettCube checks whether there is a tolerance band violation. The HettCube then automatically adjusts to the previous configured holding temperature. If there is no violation of the tolerance band the HettCube resumes its work.

PERFECT CONDITIONS

HettCube incubators combine the advantages of natural and forced convection to provide a stable and uniform environment for cultures. The fan is housed outside of usable space, providing higher throughputs and limiting airflow inside the incubator. Temperature is primarily maintained by radiated heat to ensure even temperature distribution and to prevent hot spots. This yields optimum growth conditions and considerably reduces the potential of samples drying out.

MAXIMUM USABLE SPACE – SMALLEST FOOTPRINT

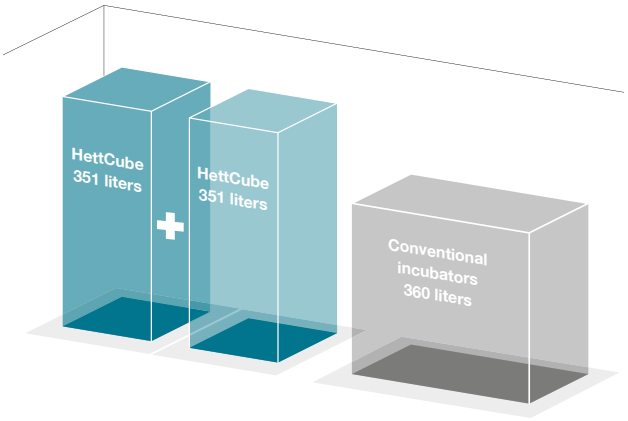
30 % MORE VALIDATED USABLE SPACE

Due to their gentle air flow and edge-to-edge temperature uniformity, HettCube incubators provide up to 30 % more validated usable space* than a traditional incubator with the same internal volume.

*in accordance with DIN 12880:2007-05

520 liters of interior space

351 liters of validated usable space*



50 % SMALLER FOOTPRINT

The HettCube's upright design requires up to 50 % less floor space than a traditional incubator with similar capacity. The space saving footprint allows you to nearly double your capacity by accommodating two HettCube incubators within the same footprint as one conventional incubator.

HettCube

702 liters of validated usable space with the same footprint

Conventional incubators

360 liters of validated usable space

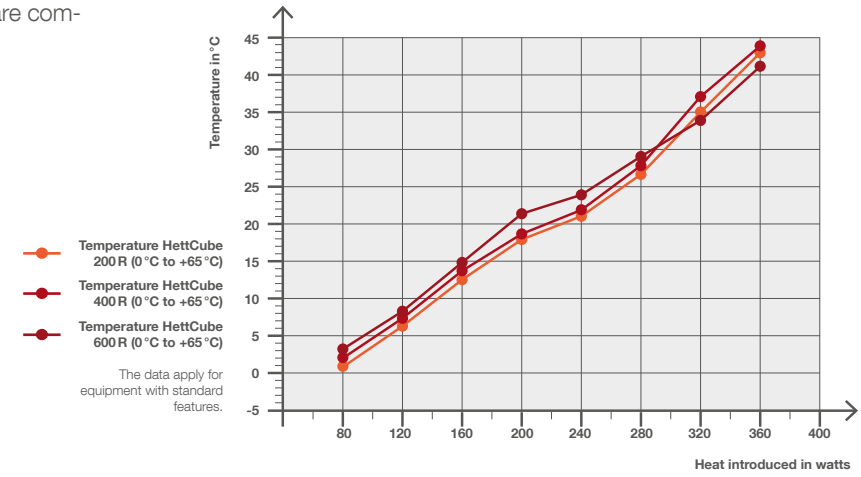
HettCube	Conventional incubators
Gentle air flow + High-performance insulation + Small footprint =	Strong air flow + Bulky insulation + Large footprint =
Maximum loading capacity + Cost savings per m^2 laboratory space	Low loading capacity + Higher costs per m^2 laboratory space

RELIABLE COMPENSATION OF TEMPERATURE DIFFERENCES BETWEEN THE INSIDE AND OUTSIDE

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.

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

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

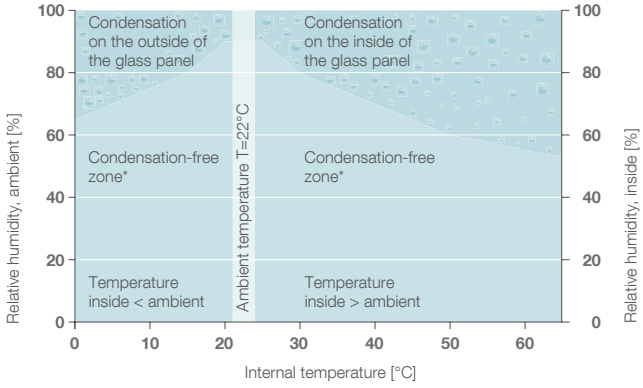


The data apply for equipment with standard features.

HETTCUBES WITH GLASS DOOR

The optional glass door enables users to check on their cultures without opening the door.

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



*Condensation possible in the boundary areas

LOW ENVIRONMENTAL IMPACT

Minimal operating costs

Our HettCubes heat or cool only when needed. At an operating temperature of 37 °C a HettCube incubator consumes less than 0.056 kWh/h. This brings average savings of up to 450 Euro annually*. Therefore, investment costs are recouped within shorter time. The use of a HettCube incubator saves on average up to 940 kg of CO_2 emissions annually*.

Additionally: The insulation of the HettCubes consists of water-driven foam, which contains no fluorinated hydrocarbons. Their GWP value (Global Warming Potential) is a thousand times lower than that of conventional insulating foams.

*Assuming 24h operation 365 days a year. The basis for calculation is € 0.29 per kWh/h – the average price of electricity in Germany in 2018 and 0.6 kg CO2 per kWh/h.

First-class isolation

The advanced control system and insulation mean that the incubator will maintain a set temperature even if there is only a difference of 1 K (°C) from the ambient temperature. This allows an uncooled HettCube incubator to be used in situations in which a comparable incubator would require cooling.

PROVEN QUALITY

Certifications

Hettich products comply with all applicable safety regulations, carry the TÜV seal and are compliant with IVD. Hettich manufactures according to the applicable quality and environmental management systems, including ISO 9001, ISO 13485 and ISO 14001.

Each HettCube is temperature validated before delivery by means of the 9 point measurement and receives a HettCert factory certificate, included free of charge. All temperature data are determined according to DIN 12880: 2007-5.