



discovery

New climatic
and thermostatic
chambers

acstestchambers.com





Angelantoni Test Technologies
stay ahead to meet the needs
of the Industry of the Future, where

Internet Technology,

Remote Connections,

Communication & Networking

are the keywords for success.

ACS is proud to announce their newest and most innovative chamber series yet - **Discovery My**. Discover the brilliant and innovative design of Discovery My chambers featuring a new cutting-edge control system, based on the new **MyKratos™** S/W, which makes possible to manage and monitor the chamber from mobile and desktop devices using Wi-Fi, Ethernet, or mobile network connections. This line of chambers comes in both thermostatic (temperature only) and climatic (temperature and humidity) versions.



discôvery

New climatic and thermostatic chambers

discôvery is everywhere

Cutting-edge control software, allowing to **manage, monitor, assist the chamber** in any place at any time in multiple ways (WiFi, Ethernet, mobile network).

discôvery is safety

Maximum safety of tests, thanks to door opening by **personal codes and settable temperature limits**.

discôvery is everything

Full range of performances, matching all requirements from stability tests to the most severe stress screening applications.

discôvery is versatile

Specific test outfits for the following applications: Battery Testing, Fast Cooling by LN2, Solar Simulation Test, Air Conditioning Unit.

discôvery is eco-friendly

Thanks to **Flower®** version, Discovery also works for the environment: **low energy consumption** for a sustainable future.

mykratos

an intelligent Control System ready for the Future

Thanks to their hyper-connectivity, ACS test chambers can match current and future needs related to the new demands of the Industrial Internet of Things and Industry 4.0 for integrated, interconnected and communicating machines.

Embedded Control Software

MyKratos™ inside, to control monitor and assist the chamber. No additional hardware or software required

Free App

to fully manage the chamber via mobile devices (Google Play and Apple Store)

Easy remote access and control

via integrated Wi-Fi / mobile network and Ethernet

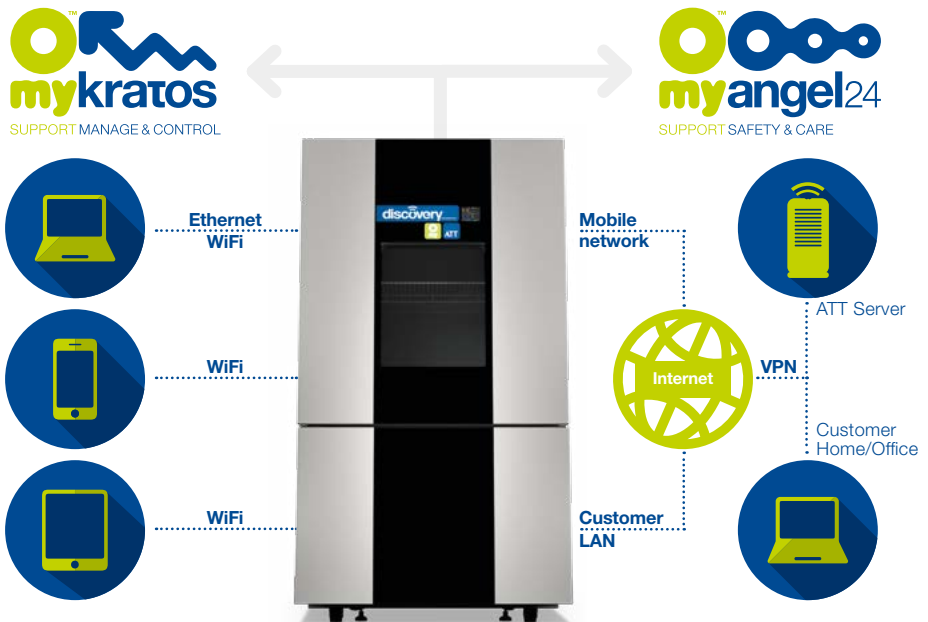
Chamber Internal Cloud

for data storage

The chamber is equipped with a **PLC** (Programmable Logic Controller) for managing all the chamber's functions and safety interlocks. A special device (**Gu@rdian Evo**) controls the chamber via "mobile" devices, such as Tablets and Smartphones, or by establishing a remote Internet connection. The HMI system consists of an on-board panel (**Keykratos Evo**) and a remote control (**MyKratos™** including **MyAngel24™**) connected to the chamber.



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All-in-one software: all functions in one application



MyKratos™ control software makes it possible to manage, monitor and assist the chamber anywhere, at any time, in multiple ways (Wi-Fi, Ethernet, mobile network) via mobile and desktop devices. The chamber wireless (Wi-Fi) connection permits operation using tablets and smartphones (iOS 8 or Android 4.2.1 compatible). The operator interface can also be remotely accessed through a chamber connection to the client's LAN or via mobile network (on activation of a SIM card data). It includes the **MyAngel24™** remote-assistance system.

Main features

- Wi-Fi or Ethernet connection to the chamber
- Visualization and graphical analysis of measures and recordings
- Synoptic charts of the entire system
- Multilanguage support
- High configurability of chamber parameters
- Unlimited measures recording possibilities
- Program and Manual chamber operation modes
- Delayed start of a program
- Possibility to select more than one chamber from a single Tablet: secure access by means of multiple password levels
- Automatic notifications of event and alarms
- Archive manager for easy access to the stored recordings
- Possibility to send email notification
- Possibility to send SMS notification (SIM card required)
- Multi-chamber management



MyKratos™ App free download



Check out our video about **MyKratos™** at www.discoverymy.com

Test program editor

- Unlimited possibilities for storing cycles of 350 segments delaying their execution
- Internal repetitions of 10 groups of segments up to 999 times each
- Possibility to upload, edit, export, and delete already existing cycles and recordings
- Graphic and numeric profile parameters data entry

Graphic functions (Graphic viewer)

- Live data update of measures on the charts
- Graphic charts or numeric table representation views on the monitor
- Graphic cursor for in-chart data measurements and evaluations
- Calculation of Measure Slopes and report generation.
- Enable/disable of chart display
- Zoom in, zoom out and scroll functions

Export function to convert the MyKratos™ log file into ASCII format (usable in Excel or other applications)

**On-Board Panel
Keykratos Evo**

Hardware

- 3.5 inch 65,536-color Analog Touch Panel with TFT technology
- Faster control

Software

- Touch menu with related pop up screens where necessary
- Manual chamber control
- Possibility to start the last stored profile
- Alarms Notification
- Main chamber's parameters setup



System available in several languages:
Italian, English, additional languages on request

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Full safety thanks to access through personal touch screen code

Operator Safety

It is possible to customize the temperature range for opening the door (the default range is between 0 and 60°C).

Personal Identification Number

A PIN code can be set to open the chamber and ensure maximum safety for the products being tested.



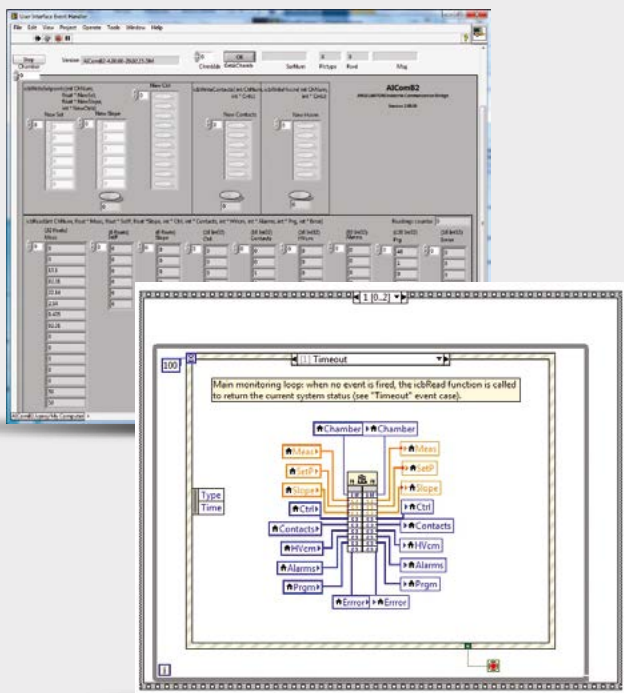
Additional S/W tools for an Easy Integration of Discovery My chambers in Test Labs

Communication drivers for an easy integration into customer-developed Serial or Ethernet based applications, (LabVIEW, LabWindows CVI, Microsoft.NET, Visual Basic 6, etc...) can be supplied on request. The drivers come with a set of examples written in Visual Basic 6, LabView, LabWindows CVI, VB.NET, and permit total interaction with Discovery My chambers, for both reading and writing.

Our communication protocol - ModBUS RTU for serial or Fetch/write for Ethernet communication, can be supplied to allow any chamber connection using the customer's own programming languages and operating systems.

Example program LabVIEW

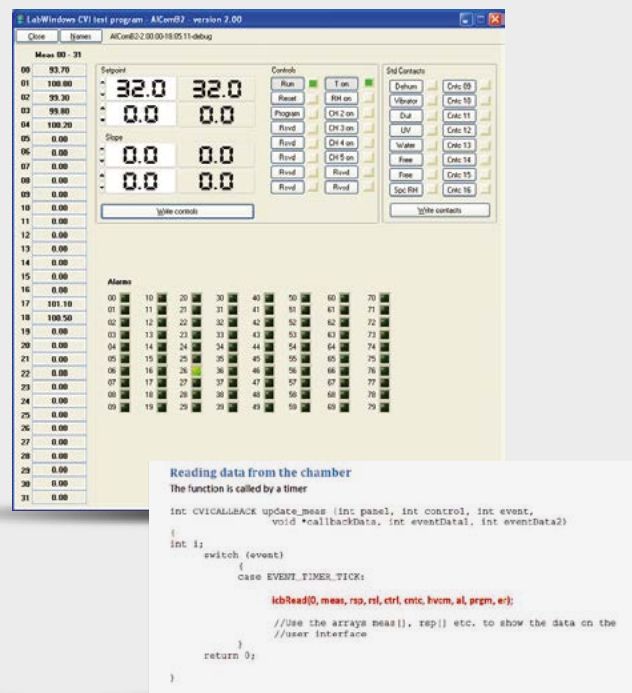
User interface



Development environment

Example program LabWINDOWS CVI

User interface



Development environment

Remote Assistance System



MyKratos™ software includes the innovative ACS remote-assistance system

MyAngel24™, operating via mobile network wireless connection, complete with SIM card.

This makes it possible to access the operator interface remotely via VPN and send



Cabled connection is also available, via customer's LAN.

N.B.: MyAngel24™ activation on demand

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Diagnostics

With **MyAngel24™**, the climatic chambers stay connected to the remote server 24 hours a day, monitoring running conditions in order to guarantee faster and more efficient service and maintenance activities.



Accessibility

With **MyAngel24™**, you can stay in contact with the climatic chamber whenever you want and wherever you are, accessing its control panel from any web browser.



Safety

MyAngel24™ uses the highest security standards available for authentication, secure connection, data encryption and storage. Moreover, you can suspend or limit the data sent to the central server for security reasons during one or more test sessions.

The advantages

MyAngel24™ is Intelligent

communicating with our technicians, making easier to schedule maintenance activities.

MyAngel24™ is Independent

updating the software and PLC program by remote.

MyAngel24™ is Easy

no need for third party software installation.

MyAngel24™ is Everywhere

accessible whenever and wherever you are, from any device with an internet connection and a simple web browser.

MyAngel24™ is Functional

saving parameters, performance, SW settings and updates.

MyAngel24™ is Secure

with 100% protection for data transfer and system access authentication.

Hardware and software infrastructure

4 simple steps
for assistance and
complete remote control

The remote server

located at Angelantoni headquarters (in Massa Martana, Perugia) hosts the database for data storage and acquisition.

The climatic chamber

is equipped with an electronic device functioning as an integrated system, allowing for connection to the remote server.

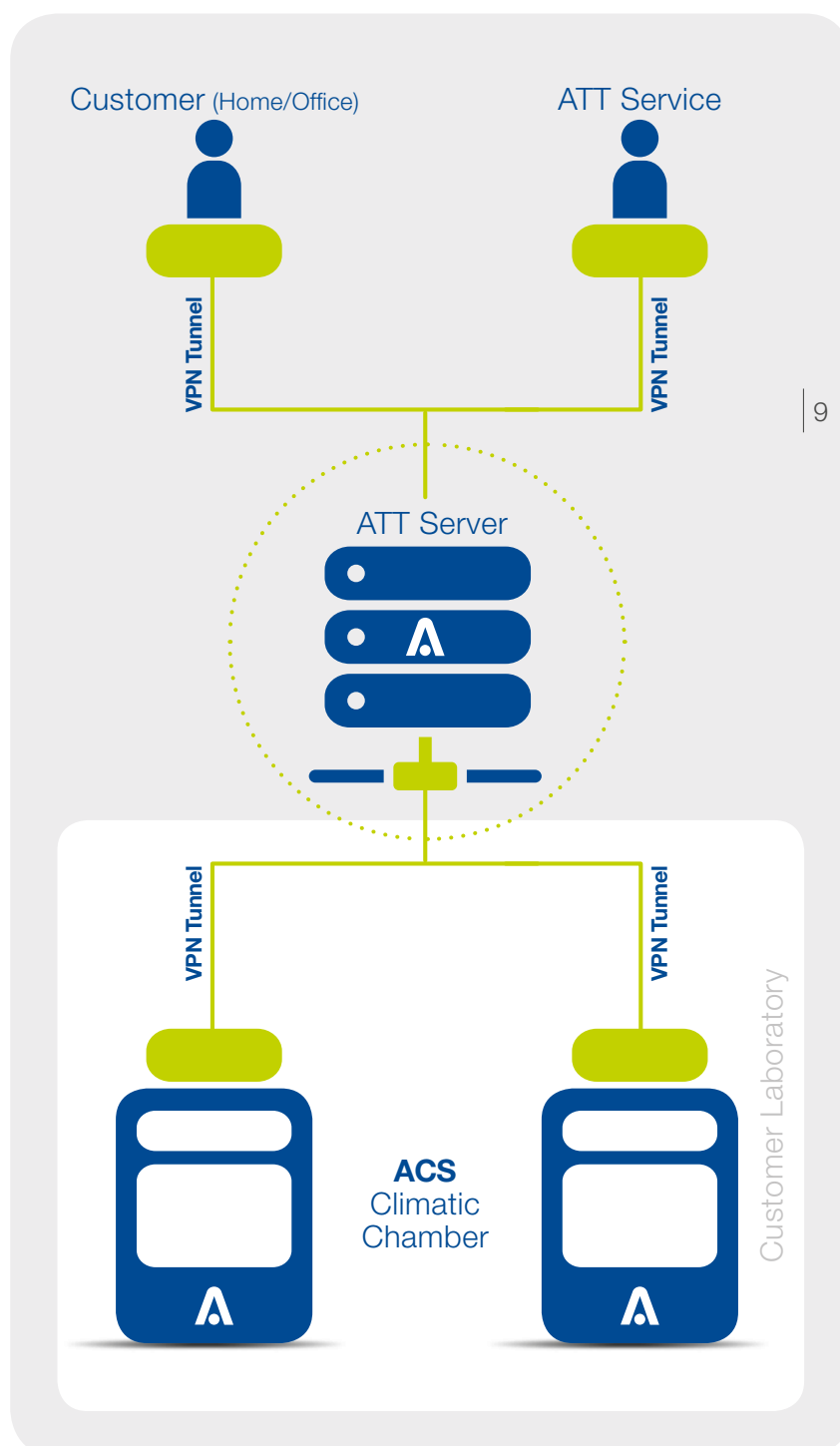
The remote connection

is created by connecting the climatic chamber to the VPN by mobile network, or on request by Ethernet connection to an enabled company LAN.

The company network connection

can be set up through a web browser, with access regulated according to a hierarchy of authentication privileges.

The connection between the climatic chamber and the remote ACS system is managed by a device with integrated VPN technology. The client establishes a secure VPN connection between the chamber and the ACS server, using a unique certificate provided by Angelantoni. The user will see the connection appear as a private network, with all communications encrypted in order to guarantee protection for sensitive data.



discôvery

discôvery
e-**very**where with you





**Universal
Use**

- 1) for Temperature only version add the suffix T
- 2) $\tau = +4^{\circ}\text{C}/+94^{\circ}\text{C}$ for continuous test
- 3) measured at 1 m distance in front of the unit in 1,6 m height, free field measurement
- 4) according to IEC 60068-3-5 and IEC 60068-3-6
- 5) The performance data refer to $+22^{\circ}\text{C}$ ambient temperature, 400V nominal voltage, without specimen

| | MODEL ¹ | DM340 (C) | DM600 (C) | DM1200 (C) | DM1600 (C) |
|---|----------------------------------|---------------------------------|----------------------|----------------------|----------------------|
| Useful capacity (l) | | 337 | 553 | 1076 | 1439 |
| Internal dimensions approx. (mm) | Width | 601 | 850 | 1000 | 1000 |
| | Depth | 810 | 730 | 1130 | 1510 |
| | Height | 694 | 892 | 953 | 953 |
| External dimensions approx. (mm) | Width | 919 | 1124 | 1278 | 1278 |
| | Depth | 1786 | 1768 | 2222 | 2600 |
| | Height | 1765 | 2049 | 2111 | 2111 |
| Temperature range (°C) | Basic | -40...+180 | -40...+180 | -40...+180 | -40...+180 |
| | C model | -75...+180 | -75...+180 | -75...+180 | -75...+180 |
| Temperature fluctuation (K) | | $\pm 0.1... \pm 0.3$ | $\pm 0.1... \pm 0.3$ | $\pm 0.1... \pm 0.3$ | $\pm 0.1... \pm 0.3$ |
| Temperature changing rate Heating ⁴⁺⁵ | Basic (-40/+180°C) | 4,5K/min | 4,5K/min | 4,5K/min | 3,5K/min |
| | C model (-70/+180°C) | 4,5K/min | 4,5K/min | 4,5K/min | 3,5K/min |
| Temperature changing rate Cooling ⁴⁺⁵ | Basic (+180/-40°C) | 3K/min | 4,5K/min | 3,3K/min | 2,7K/min |
| | C model (+180/-70°C) | 2,3°C/min | 4K/min | 2,3K/min | 2K/min |
| Humidity range (%) ($\tau = -3/+94^{\circ}\text{C}$) ² | | 10...98 | 10...98 | 10...98 | 10...98 |
| Temperature range for climatic test (°C) | | 10...95 | 10...95 | 10...95 | 10...95 |
| Humidity fluctuation (%) | | $\pm 1... \pm 3$ | $\pm 1... \pm 3$ | $\pm 1... \pm 3$ | $\pm 1... \pm 3$ |
| Maximum thermal Load (W) ⁵ | Basic T= $+25^{\circ}\text{C}$ | 2300 | 4500 | 4500 | 4500 |
| Maximum thermal Load (W) ⁵ | C model T= $+25^{\circ}\text{C}$ | 1500 | 3000 | 3000 | 3000 |
| Rated power (kW) | Basic | 7 | 10,5 | 13 | 13 |
| | C model | 8 | 13 | 15 | 15 |
| Rated current absorption (A) | Basic | 11 | 19 | 24 | 24 |
| | C model | 13 | 25 | 28 | 28 |
| Weight (kg) | Basic | 665 | 875 | 1070 | 1400 |
| | C model | 720 | 990 | 1170 | 1500 |
| Sound pressure level dB(A) ³ | Basic | 56 | 61 | 61 | 61 |
| | C model | 60 | 63 | 63 | 63 |
| Supply voltage (Vac) | | 400V $\pm 10\%$ /50Hz/3 + N + G | | | |

**Stability
test**

- 2) $\tau = +4^{\circ}\text{C}/+94^{\circ}\text{C}$ for continuous test
- 3) measured at 1 m distance in front of the unit in 1,6 m height, free field measurement
- 4) according to IEC 60068-3-5 and IEC 60068-3-6
- 5) The performance data refer to $+22^{\circ}\text{C}$ ambient temperature, 400V nominal voltage, without specimen

| | MODEL | DM340 E | DM600 E | DM1200 E | DM1600 E |
|---|--------------------------|---------------------------------|----------------------|----------------------|----------------------|
| Useful capacity (l) | | 337 | 553 | 1076 | 1439 |
| Internal dimensions approx. (mm) | Width | 601 | 850 | 1000 | 1000 |
| | Depth | 810 | 730 | 1130 | 1510 |
| | Height | 694 | 892 | 953 | 953 |
| External dimensions approx. (mm) | Width | 919 | 1124 | 1278 | 1278 |
| | Depth | 1786 | 1768 | 2222 | 2600 |
| | Height | 1765 | 2049 | 2111 | 2111 |
| Temperature range (°C) | | -20...+180 | -20...+180 | -20...+180 | -20...+180 |
| Temperature fluctuation (K) | | $\pm 0.1... \pm 0.3$ | $\pm 0.1... \pm 0.3$ | $\pm 0.1... \pm 0.3$ | $\pm 0.1... \pm 0.3$ |
| Temperature changing rate Heating ⁴⁺⁵ | (0/+100°C) | 1,5K/min | 1,5K/min | 1,5K/min | 1,5K/min |
| Temperature changing rate Cooling ⁴⁺⁵ | (+100/0°C) | 1,5K/min | 1,5K/min | 1,5K/min | 1,5K/min |
| Humidity range (%) ($\tau = -3/+94^{\circ}\text{C}$) ² | | 10...98 | 10...98 | 10...98 | 10...98 |
| Temperature range for climatic test (°C) | | 10...95 | 10...95 | 10...95 | 10...95 |
| Humidity fluctuation (%) | | $\pm 1... \pm 3$ | $\pm 1... \pm 3$ | $\pm 1... \pm 3$ | $\pm 1... \pm 3$ |
| Maximum thermal Load (W) ⁵ | T= $+25^{\circ}\text{C}$ | 600 | 850 | 850 | 900 |
| Rated power (kW) | | 7 | 10,5 | 13 | 13 |
| Rated current absorption (A) | | 11 | 19 | 24 | 24 |
| Weight (kg) | | 665 | 875 | 1070 | 1400 |
| Sound pressure level dB(A) ³ | | 56 | 61 | 61 | 61 |
| Supply voltage (Vac) | | 400V $\pm 10\%$ /50Hz/3 + N + G | | | |

Full range of performances, matching all requirements from stability tests to the most severe stress screening applications.



Stress Screening

- 2) $\tau = +4^{\circ}\text{C}/+94^{\circ}\text{C}$ for continuous test
- 3) measured at 1 m distance in front of the unit in 1,6 m height, free field measurement
- 4) according to IEC 60068-3-5 and IEC 60068-3-6
- 5) The performance data refer to $+22^{\circ}\text{C}$ ambient temperature, 400V nominal voltage, without specimen

| | MODEL | DM340 (C) ES | DM600 (C) ES | DM1200 (C) ES |
|---|--|---------------------------------|----------------------|----------------------|
| Useful capacity (l) | | 337 | 553 | 1076 |
| Internal dimensions approx. (mm) | Width | 601 | 850 | 1000 |
| | Depth | 810 | 730 | 1130 |
| | Height | 694 | 892 | 953 |
| External dimensions approx. (mm) | Width | 919 | 1124 | 1278 |
| | Depth | 1786 | 1768 | 2222 |
| | Height | 1765 | 2049 | 2111 |
| Temperature range ($^{\circ}\text{C}$) | Basic | -40...+180 | -40...+180 | -40...+180 |
| | C model | -75...+180 | -75...+180 | -75...+180 |
| Temperature fluctuation (K) | | $\pm 0.5... \pm 1$ | $\pm 0.1... \pm 0.3$ | $\pm 0.1... \pm 0.3$ |
| Temperature changing rate Heating ⁴⁺⁵ | Basic (-40/+180 $^{\circ}\text{C}$) | 8K/min | 6K/min | 6K/min |
| | C model (-70/+180 $^{\circ}\text{C}$) | 8K/min | 6K/min | 6K/min |
| Temperature changing rate Cooling ⁴⁺⁵ | Basic (+180/-40 $^{\circ}\text{C}$) | 5K/min | 6,5K/min | 7K/min |
| | C model (+180/-70 $^{\circ}\text{C}$) | 5,5K/min | 5,5K/min | 5K/min |
| Humidity range (%) ($\tau = -3/+94^{\circ}\text{C}$) ² | | 10...98 | 10...98 | 10...98 |
| Temperature range for climatic test ($^{\circ}\text{C}$) | | 10...95 | 10...95 | 10...95 |
| Humidity fluctuation (%) | | $\pm 1... \pm 3$ | $\pm 1... \pm 3$ | $\pm 1... \pm 3$ |
| Maximum thermal Load (W) ⁵ | Basic $T = +25^{\circ}\text{C}$ | 4500 | 4500 | 4500 |
| | C model $T = +25^{\circ}\text{C}$ | 3000 | 3000 | 3000 |
| Rated power (kW) | Basic | 9,9 | 13,4 | 20 |
| | C model | 12 | 16,2 | 24,2 |
| Rated current absorption (A) | Basic | 17 | 24 | 35 |
| | C model | 21 | 29 | 42,5 |
| Weight (kg) | Basic | 820 | 985 | 1180 |
| | C model | 904 | 1090 | 1280 |
| Sound pressure level dB(A) ³ | Basic | 58 | 63 | 64 |
| | C model | 63 | 66 | 68 |
| Supply voltage (Vac) | | 400V $\pm 10\%$ /50Hz/3 + N + G | | |

Severe Stress Screening

- 1) for Temperature only version add the suffix T
- 2) $\tau = +4^{\circ}\text{C}/+94^{\circ}\text{C}$ for continuous test
- 3) measured at 1 m distance in front of the unit in 1,6 m height, free field measurement
- 4) according to IEC 60068-3-5 and IEC 60068-3-6
- 5) The performance data refer to $+22^{\circ}\text{C}$ ambient temperature, 400V nominal voltage, without specimen

| | MODEL ¹ | DM250 C10 (15) ESS | DM500 C10 (15) ESS | DM1000 C10 (15) ESS | DM1400 C10 (15) ESS |
|---|---|---------------------------------|--------------------|---------------------|---------------------|
| Useful capacity (l) | | 255 | 438 | 1040 | 1368 |
| Internal dimensions approx. (mm) | Width | 601 | 850 | 1000 | 1000 |
| | Depth | 615 | 580 | 1020 | 1342 |
| | Height | 692 | 890 | 1020 | 1020 |
| External dimensions approx. (mm) | Width | 888 | 1137 | 1287 | 1287 |
| | Depth | 2080 | 2058 | 2512 | 2891 |
| | Height | 1777 | 2060 | 2190 | 2190 |
| Temperature range ($^{\circ}\text{C}$) | | -75...+180 | -75...+180 | -75...+180 | -75...+180 |
| Temperature fluctuation (K) | | $\pm 0.5... \pm 1$ | $\pm 0.5... \pm 1$ | $\pm 0.5... \pm 1$ | $\pm 0.5... \pm 1$ |
| Temperature changing rate Heating ⁴⁺⁵ | C 10 ESS (-70/+180 $^{\circ}\text{C}$) | 10K/min | 10K/min | 10K/min | 10K/min |
| | C 15 ESS (-70/+180 $^{\circ}\text{C}$) | 15K/min | 15K/min | 15K/min | 15K/min |
| Temperature changing rate Cooling ⁴⁺⁵ | C 10 ESS (+180/-70 $^{\circ}\text{C}$) | 10K/min | 10K/min | 10K/min | 10K/min |
| | C 15 ESS (+180/-70 $^{\circ}\text{C}$) | 15K/min | 15K/min | 15K/min | 15K/min |
| Humidity range (%) ($\tau = -3/+94^{\circ}\text{C}$) ² | | 10...98 | 10...98 | 10...98 | 10...98 |
| Temperature range for climatic test ($^{\circ}\text{C}$) | | 10...95 | 10...95 | 10...95 | 10...95 |
| Humidity fluctuation (%) | | $\pm 3... \pm 5$ | $\pm 3... \pm 5$ | $\pm 3... \pm 5$ | $\pm 3... \pm 5$ |
| Maximum thermal Load (W) ⁵ | C 10 ESS $T = +25^{\circ}\text{C}$ | 6000 | 7000 | 8000 | 8000 |
| | C 15 ESS $T = +25^{\circ}\text{C}$ | 8000 | 8000 | 9000 | 9000 |
| Rated power (kW) | | 20,6 | 30,5 | 45,3 | 57,1 |
| Rated current absorption (A) | | 40 | 52 | 85 | 104 |
| Weight (kg) | | 1070 | 1225 | 1500 | 1670 |
| Sound pressure level dB(A) ³ | | 69 | 74 | 76 | 76 |
| Supply voltage (Vac) | | 400V $\pm 10\%$ /50Hz/3 + N + G | | | |

Flower® patented technology allows to reduce energy consumption and minimize environmental impacts.

Energy Consumption

Up to 70% reduction of energy consumption can be assured during the stabilization and transition phases due to a unique and “patented system” which includes:

1. an inverter that controls compressor speed and allows the adaptation of compressor power to different working needs.
2. a “cold sink” to increase the cooling efficiency.

Noise Level

Up to 50% sound pressure reduction is obtained due to:

1. an inverter on the compressor which reduces the rotation speed according to working conditions
2. an automatic control system that reduces condenser blower rotating speed according to ambient temperature and cooling power.

| | MODEL | FM340 (C) | FM600 (C) | FM1200 (C) |
|--|----------------------|--------------------------|-------------|-------------|
| Useful capacity (l) | | 337 | 553 | 1076 |
| Internal dimensions approx. (mm) | Width | 601 | 850 | 1000 |
| | Depth | 810 | 730 | 1130 |
| | Height | 694 | 892 | 953 |
| External dimensions approx. (mm) | Width | 919 | 1124 | 1278 |
| | Depth | 1786 | 1768 | 2222 |
| | Height | 1765 | 2049 | 2111 |
| Temperature range (°C) | Basic | -40...+180 | -40...+180 | -40...+180 |
| | C model | -75...+180 | -75...+180 | -75...+180 |
| Temperature fluctuation (K) | | ±0.1...±0.3 | ±0.1...±0.3 | ±0.1...±0.3 |
| Temperature changing rate Heating ⁴⁺⁵ | Basic (-40/+180°C) | 4,5K/min | 6K/min | 6K/min |
| | C model (-70/+180°C) | 4,5K/min | 6K/min | 6K/min |
| Temperature changing rate Cooling without the “cold sink” ⁴⁺⁵ | Basic (-40/+180°C) | 3K/min | 4,5K/min | 4K/min |
| | C model (-70/+180°C) | 2,3K/min | 4K/min | 3K/min |
| Temperature changing rate Cooling with the “cold sink” ⁴⁺⁵ | Basic (-40/+180°C) | 6K/min | 6,5K/min | 7K/min |
| | C model (-70/+180°C) | 3,8K/min | 5,5K/min | 5K/min |
| Humidity range (%) ($\tau=-3/+94^{\circ}\text{C}$) ² | | 10...98 | 10...98 | 10...98 |
| Temperature range for climatic test (°C) | | 10...95 | 10...95 | 10...95 |
| Humidity fluctuation (%) | | ±1...±3 | ±1...±3 | ±1...±3 |
| Maximum thermal Load (W) ⁵ | Basic T=+25°C | 2300 | 4500 | 4500 |
| | C model T=+25°C | 1500 | 3000 | 3000 |
| Rated power (kW) | Basic | 6,9 | 13,4 | 20 |
| | C model | 8,4 | 16,2 | 24,2 |
| Rated current absorption (A) | Basic | 12,5 | 24 | 35 |
| | C model | 15 | 29 | 42,5 |
| Weight (kg) | Basic | 780 | 985 | 1180 |
| | C model | 830 | 1090 | 1280 |
| Sound pressure level dB(A) ³ | Basic | 58 | 63 | 64 |
| | C model | 63 | 66 | 68 |
| Sound pressure level at steady cond. dB(A) ³ | Basic | 54 | 56 | 59 |
| | C model | 56 | 60 | 63 |
| Supply voltage (Vac) | | 400V ±10%/50Hz/3 + N + G | | |

2) $\tau= +4^{\circ}\text{C}/+94^{\circ}\text{C}$ for continuous test

3) measured at 1 m distance in front of the unit in 1,6 m height, free field measurement

4) according to IEC 60068-3-5 and IEC 60068-3-6

5) The performance data refer to +22°C ambient temperature, 400V nominal voltage, without specimen

discovery is versatile

A made-to-measure outfit for every test.

Air Conditioning Unit kit



The chamber can be used either stand-alone or for conditioning an external test box connected by means of flexible pipes.

Solar Simulation Kit



A special lamp array located on the top of the chamber makes it possible to meet the main solar simulation standards, such as DIN 75220, IEC 60068-2-5, ISO 9022-9, VDA 230-219.

Fast cooling Kit by LN2



Permits accelerating the rate of cooling down to the lowest temperature limits, increasing the severity of the test.

Battery Testing



A set of dedicated options is now available for this specific market. Gas detection, fire extinguisher and overpressure valves: all devices have been optimized in accordance with the EUCAR Hazard Leves so as to create a standard for safety analyses.

Further customise your **discôvery**

Discovery chambers come with a wide range of included accessories



Basic Configuration

- **MyKratos™** and **MyAngel24™**
- Electromagnetic closing system
- Inspection window
- Self-pivoting wheels and feet
- Air condenser
- Internal light
- Self feeding system (town water through chamber embedded softener)
- No. 1 internal grid shelf
- Humidification water recycling system
- Min/max digital thermostat with independent probe
- Silicone portholes
- No. 1 auxiliary free contact
- Ethernet port
- RS232 serial interface



Check out our 3D animation at www.discoverymy.com



Options

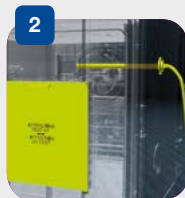
- Additional portholes **1**
- UV lamp **2**
- Handling port hole (available for models from 500 litres up) **3**
- Internal shelves
- Water condenser **4**
- Reinforced floor **5**
- Capacitive probe
- Notch **6**
- Set of no.4 analogic inputs
- Set of no. 4 PT100 inputs
- Set of no. 4 PT100 probes
- Set of no. 8 auxiliary contacts
- No break power unit for PLC
- Temperature extension to +200°C
- Air fan motor speed adjustment
- Air flow booster
- Specimen switching off in case of chamber alarm
- Compressed air dehumidification kit **7**
- T e RH analogic retransmission
- Surface cleaning set
- Tablet



1 Through holes
Ø 80 and 150mm.
For electrical, mechanical, and hydraulic connections inside and outside the chamber.



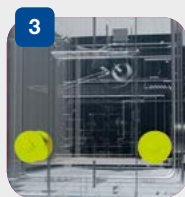
4 Water cooled condenser
Ideal for test areas without air conditioning.



2 UV lamp
For ageing tests on painted, plastic, rubber, and other surfaces.



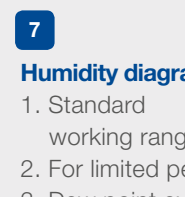
5 Reinforced floor
Withstands samples up to 500 kg.



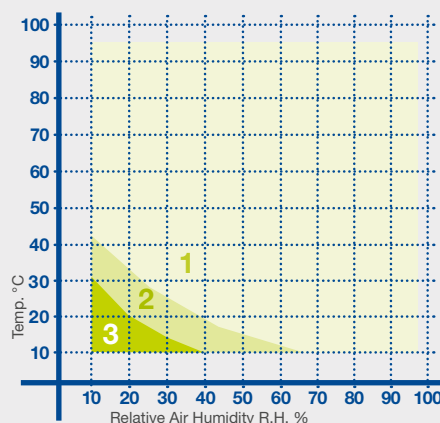
3 Handling hole
Ø 125mm.
Located on the door, it allows the samples handling.

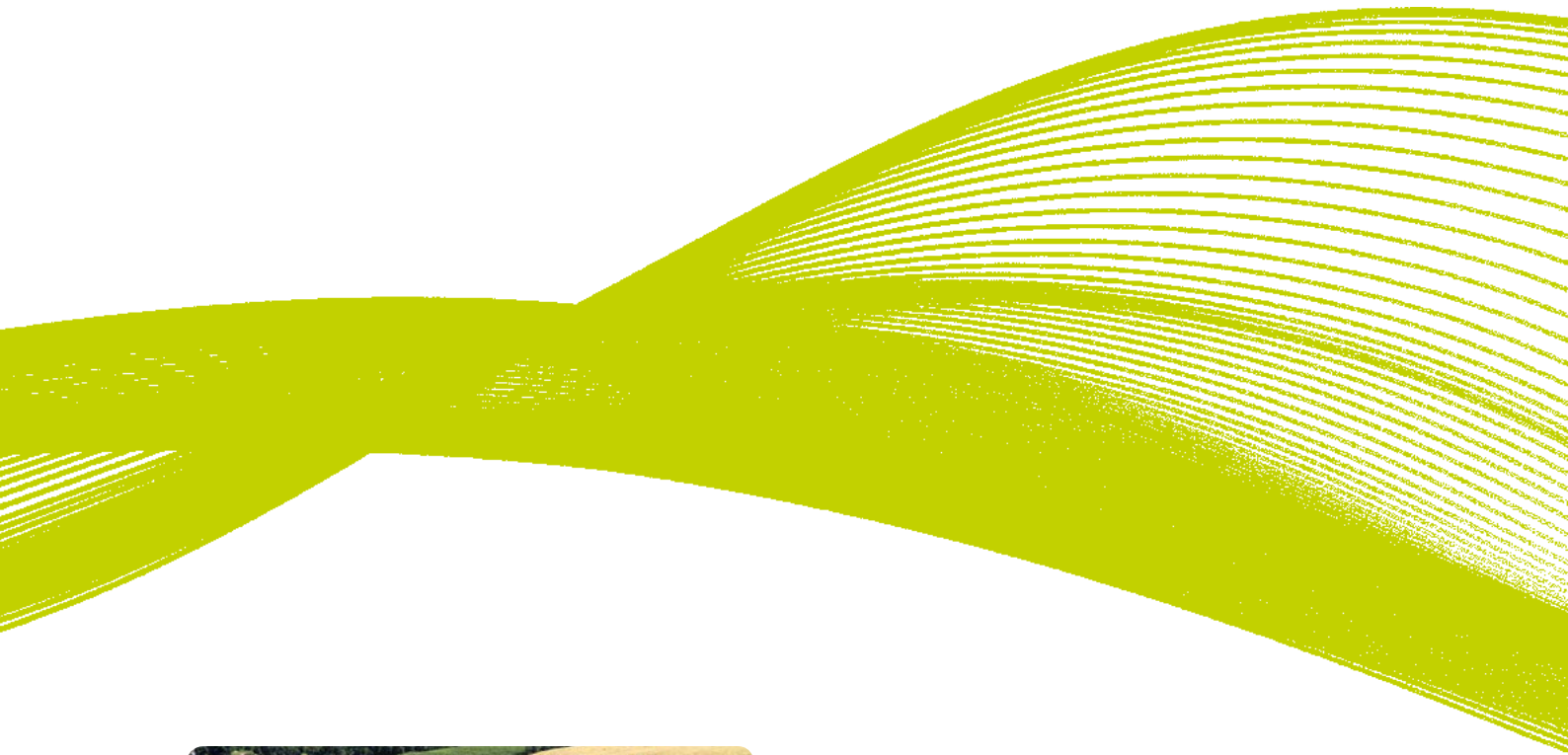


6 Notch
70x50(h) mm.
Ideal for complex connections to the sample.



7 Humidity diagram
1. Standard working range
2. For limited periods
3. Dew point extension -40°C (Optional)

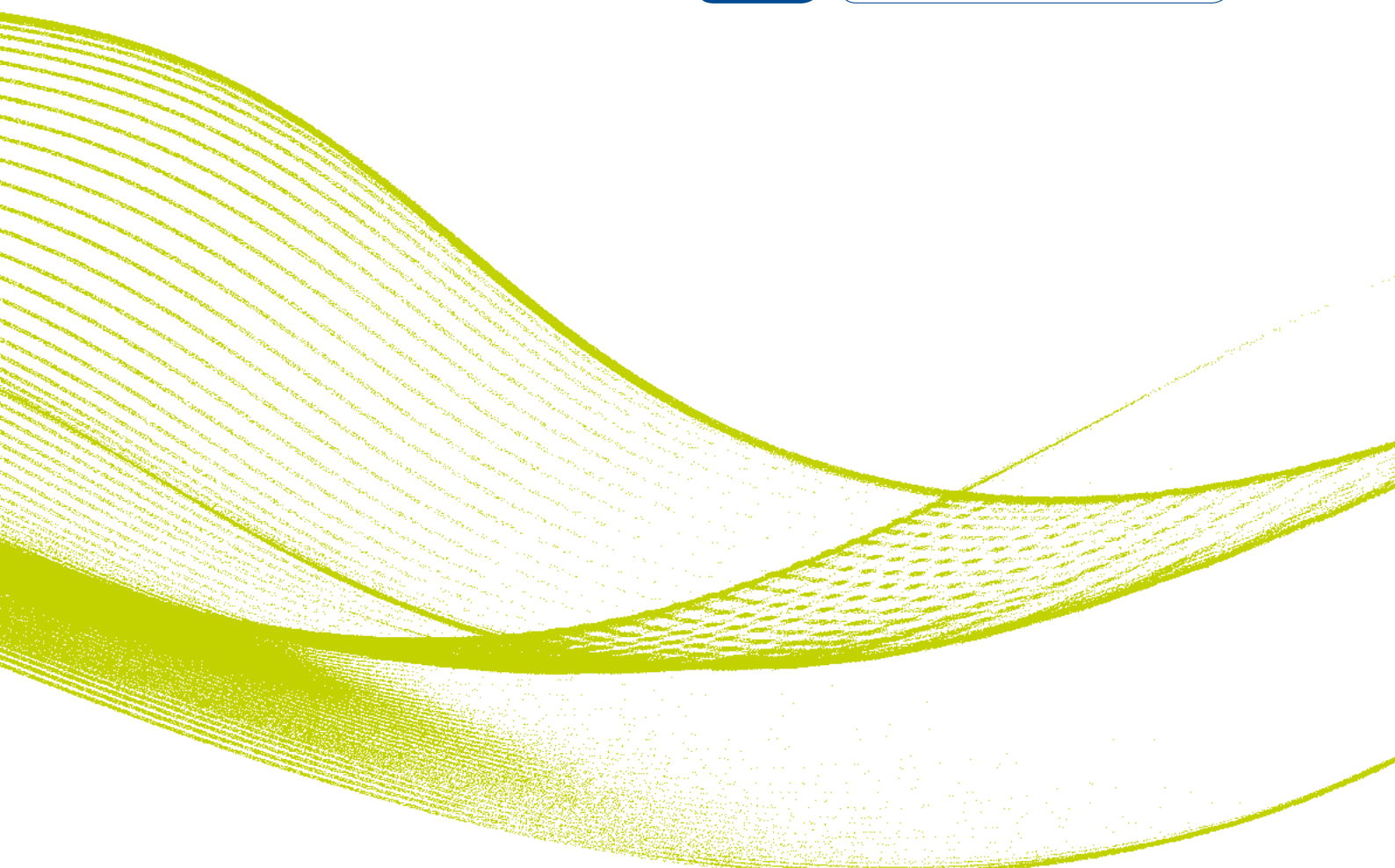




Angelantoni Test Technologies, owned by the **Angelantoni Group**, is the only company capable of offering a comprehensive range of environmental test chambers - **ACS** branded - for a great variety of applications, thanks to the expertise and technical know-how of its teams of experts. Innovation, flexibility and organization have always been the keys to success for ACS, world-famous since 1952 also for its high-tech test equipment such as Thermal High Vacuum Chambers for Aerospace applications and Calorimeters.



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