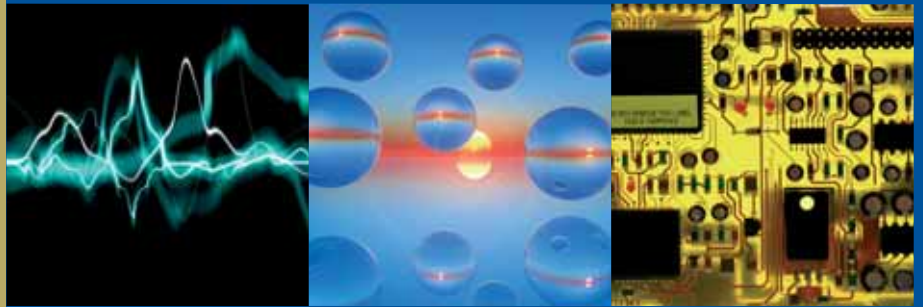




# Anyvib

Vibration test chambers





## Why "anyvib"?

### WHY "ANYVIB"?

Because "anyvib" is the easiest way to combine any kind of shaker with an environmental test chamber. "anyvib" is a new family of climatic chambers that can be interfaced with many various types of shakers for vertical, horizontal and tri-axial vibrations.

### VERY EASY OPERATION

A worm screw type of lifting system allows to adapt the test cabinet to the shaker height. The movement can be set from the control panel on the chamber. It is also possible to add horizontal movement on request. This is especially valuable if your shaker allows both vertical and horizontal movement or if you want to use more shakers with the same chamber.

### GREAT FLEXIBILITY

Different removable floors, for vertical and horizontal vibrations, can adapt the chamber to any existing standard shakers. If there is the need to use the chamber without the shaker in place, a blind floor plug is available.

### STANDARD MODELS

The available volumes in both thermostatic and climatic versions are 600, 1200 and 2200 litres. No. 3 choices of temperature change rate are available for the -70/+180°C models: 5, 10, or 15°C/minute, while 5°C/min is the only available rate for the -40/+180°C models. For all the climatic models the humidity range is from 10% to 98% (in the temperature range of +5/+95°C).

### USER FRIENDLY CONTROLS

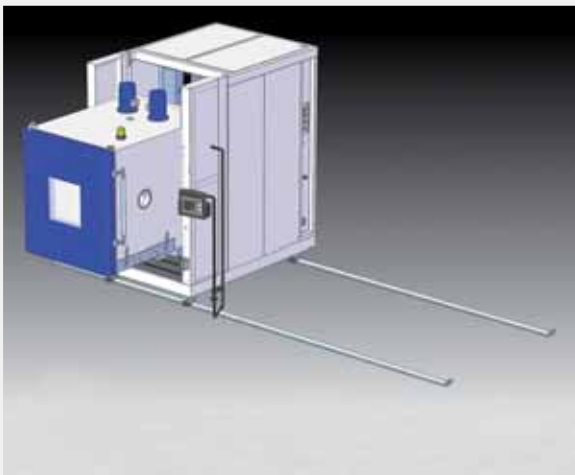
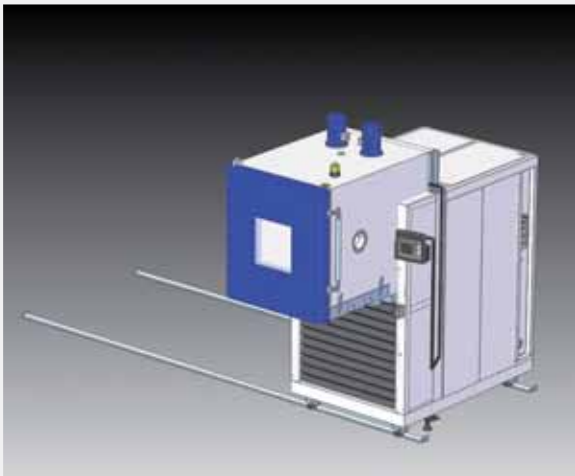
The control system, based on PLC, has an easy to use color touch-screen control panel (KeykratosPlus). The optional WinKratos software, developed by ATT, allows the PC control of the chamber.

### REMOTE ASSISTANCE SYSTEM

Anyvib chambers are equipped with the new remote assistance system MyAngel24™: the chambers stay connected to the remote server 24 hours a day, monitoring running conditions and any anomalies, in order to guarantee faster and more efficient service and maintenance activities. They are accessible whenever and wherever you are, from any device with an internet connection and a simple web browser.

### WIDE RANGE OF ACCESSORIES

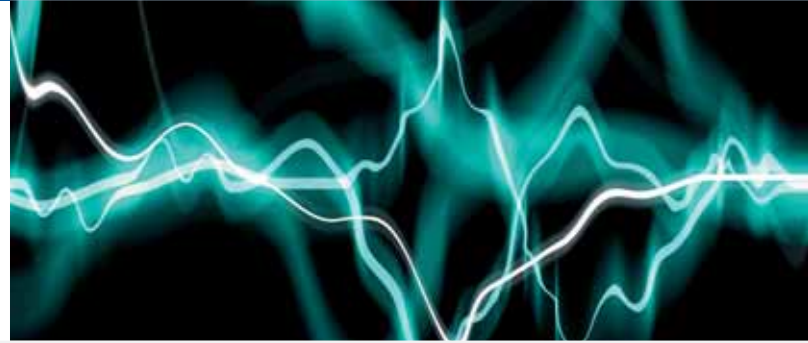
Besides the main accessories included in the basic configuration, "anyvib" chambers can be equipped with several options to make them fit to customer specific needs.



Test cabinet movement can be set by a detachable control panel.



## A remarkable basic configuration



### INCLUDED ACCESSORIES

- Test cabinet automatic lifting system with detachable control panel.
- Removable floor for vertical shaker (fixed hole sizes are available on request).
- Blind floor plug (only for vertical shaker floors).
- Inspection window: multiple glass layers, with double heated transparent film, 450x450mm size.
- Embedded softener for humidification water (no distilled water is required).
- Ethernet port .
- Two lateral portholes fitted with silicone rubber cap (80 mm dia. on the left side, 150 mm dia. on the right side). They allow internal-external electrical, mechanical or hydraulic connections.
- Safety thermostat: max./min. digital thermostat with independent probe. It can be also used to disconnect the supply of the device under test.
- Color touch screen control panel.

Model	Useful capacity	Int. Useful Dims (WxDxH)	Ext. Dims (WxDxH)	Max Ext. Height*	Temperature Range	Temp. Accuracy (in time)	Heating and cooling speed (in the given Temperature Range)**	RH range (in the range +5/+95°C)	Electrical power (KW max)	Noise (dbA)***	Weight	Water consumption (l/min)****
AV600 T 5	610 l	850x740x970	1340x3000x2350	2950	-40°C/+180°C	±0,1°C...±0,8°C	5°C/min		18	68	1250	60
AV600 5	610 l	850x740x970	1340x3,00x2350	2950	-40°C/+180°C	±0,1°C...±0,8°C	5°C/min	10% / 98%	18	68	1250	60
AV600 TC 5	610 l	850x740x970	1340x3000x2350	2950	-75°C/+180°C	±0,1°C...±0,8°C	5°C/min		21	70	1500	60
AV600 C 5	610 l	850x740x970	1340x3000x2350	2950	-75°C/+180°C	±0,1°C...±0,8°C	5°C/min	10%...98%	21	70	1500	60
AV600 TC 10	610 l	850x740x970	1340x3000x2350	2950	-75°C/+180°C	±0,1°C...±0,8°C	10°C/min		36	74	2200	80
AV600 C 10	610 l	850x740x970	1340x3000x2350	2950	-75°C/+180°C	±0,1°C...±0,8°C	10°C/min	10%...98%	36	74	2200	80
AV600 TC 15	610 l	850x740x970	1340x3000x2350	2950	-75°C/+180°C	±0,1°C...±0,8°C	15°C/min		38	74	2200	100
AV600 C 15	610 l	850x740x970	1340x3000x2350	2950	-75°C/+180°C	±0,1°C...±0,8°C	15°C/min	10%...98%	38	74	2200	100
AV1200 T 5	1220 l	1000x1130x1080	1490x3550x2350	3050	-40°C/+180°C	±0,1°C...±0,8°C	5°C/min		26	72	1950	80
AV1200 5	1220 l	1000x1130x1080	1490x3550x2350	3050	-40°C/+180°C	±0,1°C...±0,8°C	5°C/min	10%...98%	26	72	1950	80
AV1200 TC 5	1220 l	1000x1130x1080	1490x3550x2350	3050	-75°C/+180°C	±0,1°C...±0,8°C	5°C/min		36	74	2400	80
AV1200 C 5	1220 l	1000x1130x1080	1490x3550x2350	3050	-75°C/+180°C	±0,1°C...±0,8°C	5°C/min	10%...98%	36	74	2400	80
AV1200 TC 10	1220 l	1000x1130x1080	1490x3550x2350	3050	-75°C/+180°C	±0,1°C...±0,8°C	10°C/min		36	74	2400	100
AV1200 C 10	1220 l	1000x1130x1080	1490x3550x2350	3050	-75°C/+180°C	±0,1°C...±0,8°C	10°C/min	10%...98%	36	74	2400	100
AV1200 TC 15	1220 l	1000x1130x1080	1490x3550x2350	3050	-75°C/+180°C	±0,1°C...±0,8°C	15°C/min		51	80	2900	160
AV1200 C 15	1220 l	1000x1130x1080	1490x3550x2350	3050	-75°C/+180°C	±0,1°C...±0,8°C	15°C/min	10%...98%	51	80	2900	160
AV2200 T 5	2187 l	1350x1350x1200	2050x4050x2450	3170	-40°C/+180°C	±0,1°C...±0,8°C	5°C/min		29	72	2350	100
AV2200 5	2187 l	1350x1350x1200	2050x4050x2450	3170	-40°C/+180°C	±0,1°C...±0,8°C	5°C/min	10%...98%	29	72	2350	100
AV2200 TC 5	2187 l	1350x1350x1200	2050x4050x2450	3170	-75°C/+180°C	±0,1°C...±0,8°C	5°C/min		34	74	2500	100
AV2200 C 5	2187 l	1350x1350x1200	2050x4050x2450	3170	-75°C/+180°C	±0,1°C...±0,8°C	5°C/min	10%...98%	34	74	2500	100
AV2200 TC 10	2187 l	1350x1350x1200	2050x4050x2450	3170	-75°C/+180°C	±0,1°C...±0,8°C	10°C/min		53	80	2900	160
AV2200 C 10	2187 l	1350x1350x1200	2050x4050x2450	3170	-75°C/+180°C	±0,1°C...±0,8°C	10°C/min	10%...98%	53	80	2900	160
AV2200 TC 15	2187 l	1350x1350x1200	2050x4050x2450	3170	-75°C/+180°C	±0,1°C...±0,8°C	15°C/min		74	84	3400	300
AV2200 C 15	2187 l	1350x1350x1200	2050x4050x2450	3170	-75°C/+180°C	±0,1°C...±0,8°C	15°C/min	10%...98%	74	84	3400	300

\* with test cabinet in the highest position

\*\* for C and TC models the speed is considered in the range -70°C... +180°C

\*\*\* measured at 1 meter from the front in a non reverberating room

\*\*\*\* at a cooling water temperature of +29°C and temperature difference of 5°C, water temperature +12°C to +29°C

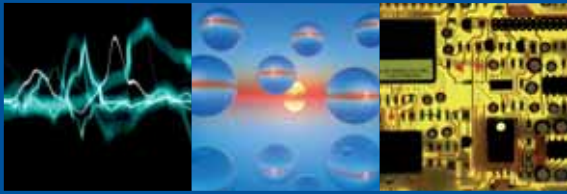


Chamber/shaker turn-key system...



to make your life easier!





## Anyvib accessories



### OPTIONS

- Removable floor for horizontal shaker (no plug available).
- Automatic or manual horizontal movement of the chamber.
- Deep dehumidification system by compressed air.
- WinKratos software.
- Multichamber remote control: consisting of PC complete with WinKratos software (multichamber control version) and connection configuration kit for controlling several chambers (up to 16) from the same PC.
- Set of no. 8 auxiliary contacts (no. 1 set max.).
- Handling port hole: 120 mm of diameter, it is positioned on the door under the inspection window. It allows the handling of specimens inside the chamber (no. 2 max).
- Additional set of no. 4 analog inputs: it allows the user to acquire additional data.
- Internal shelves: AISI 304 stainless steel, adjustable in height, grid shelves.

**Further accessories, such as GN2 purge, GN2 shock cooling, adjustable air speed, notches and special voltages/frequencies are available on request.**

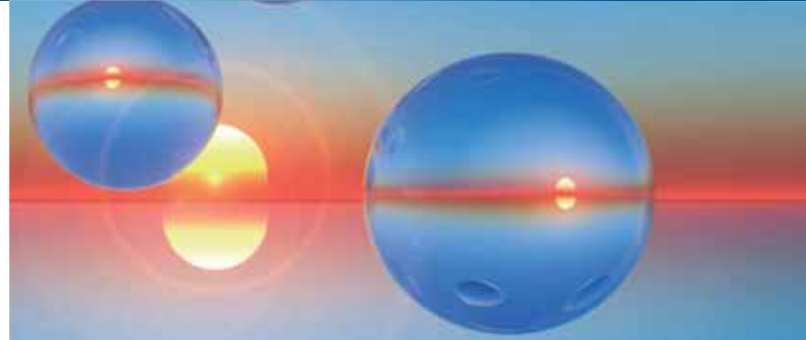
### GATEKEEPER® DOOR ELECTRO-MAGNETIC OPENING SYSTEM

The Gatekeeper® is the innovative and patented opening system based on a transponder key that ensures the security of the environmental tests. Personal magnetic TAG allows the opening of the door only to the people having permission to work with the equipment. This magnetic card has to be scanned by an electronic eye that recognizes the card code and permits opening. As additional safety against dangerous temperatures, the control system of the chamber allows the opening of the door only in a predefined temperature range (usually from 0°C to +50°C). (The opening is always possible with an emergency push-button.) The closing is made through an electro-magnetic system located in the right side of the door like a standard lock. The electromagnetic closing system is equipped with a battery that, in case of power failure, ensures the door remains locked for up to 8 hours. At the completion of the test the door will be unlocked automatically.

**NEW chamber/shaker turn-key systems:  
contact us for personalized solutions.**



# Control system and user interface



### KEYKRATOS PLUS

#### Hardware

- TFT touch screen panel, 5,7", 65000 colours
- Faster control
- 3 types of memory support for storing cycles, recordings, and alarms: SD memory card, Pendrive (USB key style), Internal memory

#### Software

- Touch menu with related pop up screens where necessary
- Memory capacity to 1000 cycles with 350 segments each (on SD memory card)
- User friendly data input during editing, check and administration of cycle
- Delayed start of the tests (hh:mm:ss)
- Real time recording of temperature, humidity and pressure versus time (LOG on SD memory card)
- USB interface on front panel for stick or printer
- Recordings in CSV format (Comma Separated Value) for easy export to Excel®, program files are easily convertible into graphic format
- A trend chart for recorded variables available with a scale from -100/+200°C
- Four traces: temperature set point, actual temperature, humidity set point and actual humidity (the last two only for climatic version)
- System available in 6 languages: Italian, English, German, Spanish, French, Dutch

### PC WINKRATOS SOFTWARE (optional)

WinKratos S/W package running under Windows XP, Vista, 7, 8 (32 or 64 bit), Professional Edition or higher offers a powerful and flexible control and management system.

#### It allows the user to:

- Create test programs
- Refer to and modify previously created test programs
- Delete all test programs that are no longer necessary
- Print any test program in text format

#### Main features

- Connection to PLC through Ethernet, up to 16 chambers can be connected to the same WinKratos
- Colour printing
- Multiple access password levels

#### Graphic functions

- Fully-configurable layout of acquired measures charts
- Display of several charts on the monitor
- Several colours to be chosen at one's choice for the display of different parameters' curves
- Enable/disable of chart display and grids
- Real-time update of acquired measures charts

#### Acquisition functions

- Real-time measurement of test parameters by means of graphic cursors
- Max. flexibility for cycles to be set
- Storage of occurred events such as alarms, commands, etc

WinKratos may be installed on PCs supplied by ACS or belonging to the customer.

KeyKratos Plus - Main window



WinKratos S/W - Notes on the graph



### NEW

- Ability to add notes on the graphs
- Delayed start of the tests
- Optimized view of synoptic graphs
- Two editing modes: "entry-level" and "advanced"

**Angelantoni Test Technologies (ATT)**, a company of the Angelantoni Group, is the only company capable of offering a broad range of test solutions for a great variety of applications, thanks to the expertise and technical know-how of its worldwide teams of experts. Three leading test technology brands belong to ATT: **ACS**, world-famous since 1952 for its design and manufacture of a comprehensive range of environmental test chambers, including high-tech test equipment such as high vacuum chambers for aerospace applications and calorimeters. With the acquisition of companies in France and Germany, and new joint ventures in China and India, other brands of test chambers are now available on the worldwide market: BIA Climatic, TIRA Umweltsimulation and ZUNDAR.

**BIA**, providing test benches and crash test systems to major companies, mainly in the automotive and aerospace fields, since 1986. The company philosophy is to provide innovative solutions through close cooperation with the customer in order to guarantee continual improvement of product quality and performance and optimize testing costs.

**TIRA**, specialized in electrodynamic shakers, material testing equipment, and balancing systems. Internationally renowned automotive manufacturers and suppliers, manufacturers of high-speed rotating components, aviation and aerospace equipment manufacturers, research facilities and institutes, and test centres all benefit from TIRA products and services worldwide.

**Our core competencies and services for total customer satisfaction:**

- Training, both at our facility and at customer site
- Testing and quality checks
- Installation and start up
- Preventive maintenance
- Service
- Calibration using SIT certified instruments
- "Full risk" assistance contracts
- Extended warranties
- Existing chamber validation
- Retrofitting of older chambers, including instrumentation and new environmentally friendly refrigerants
- Exchange and sale of used chambers
- Research and development
- Production and assembly
- Market analysis and advice
- Special applications



ISO 14001



ISO 9001