PRODUCT CATALOGUE 2026

Environmental Test Chambers

Temperature and humidity, thermal shock, salt spray corrosion, xenon arc and UV weathering, and IP dust and water ingress testing.







INTRODUCTION

Environmental testing for middle and high volume production

INTEON offers a complete range of environmental test chambers: temperature and humidity, thermal shock, salt spray corrosion, xenon arc and UV weathering, and IP dust and water ingress testing. The chambers are designed for middle to high volume production and laboratory use, combining high quality and performance with an attractive price.

Warranty

3 years

3-year warranty on INTEON environmental test chambers.

Standard and custom

Every chamber is available in standard sizes, and custom-made solutions are possible for specific testing requirements.

Support in Europe

Sales, installation, training and service in Europe through InterElectronic, the INTEON distributor.

Offers

Prices are given individually after consultation. Tell us your test standard, specimen size and volume, and we recommend the right chamber.

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HEAT, COLD AND HUMIDITY

Temperature Humidity Test Chamber

TH-100 · TH-225 · TH-500 · TH-800 · TH-1000

−70 to +150 °C | **20–98% RH**

For testing the function and service life of products by simulating harsh environments with controlled heat, cold and humidity. Used in automotive, aerospace, electronics, battery, cable, PV panel, pharmaceutical and materials testing.



FEATURES

- Wide temperature and humidity ranges, five chamber volumes
- PID programmable colour touch screen controller: 100 programs × 20 segments
- Multi-language interface, USB and Ethernet, PC link
- Mirror-finish SUS304 stainless steel interior, 2 perforated stainless steel shelves
- Standard test port on the left side of the workroom
- Water recirculation and automatic water supply
- Mechanical compression refrigeration, versions down to −86 °C
- Long-term 85 °C / 85% RH testing
- 4 castors with brakes, safety protection system, CE mark

SPECIFICATIONS

Model	TH-100	TH-225	TH-500	TH-800	TH-1000
Internal dimensions (mm)	400×500×500	500×600×750	700×800×900	800×1000×1000	1000×1000×1000
Overall dimensions (mm)	860×1050×1620	960×1150×1860	1180×1350×2010	1280×1550×2110	1500×1550×2110
Interior volume	100 L	225 L	500 L	800 L	1000 L
Heat load	1000 W				
Temperature range	A: −20 to +150 °C · B: −40 to +150 °C · C: −70 to +150 °C				
Temperature fluctuation	±0.5 °C				
Temperature deviation	±2.0 °C				
Humidity range	20–98% RH				
Humidity deviation	±2.5% RH				
Cooling / heating rate	1 °C/min / 3 °C/min				
Cooling system	Mechanical compression refrigeration, refrigerant R449A / R508B				
Controller	Programmable colour LCD touch screen controller, Ethernet, PC link				
Water supply	Automatic water supply, water purification system				
Safety devices	Humidifier dry-burn, over-temperature, over-current, refrigerant high-pressure, water shortage and earth leakage protection				
Exterior / interior	Steel plate with protective coating / SUS304 stainless steel				
Power supply	220 V 50 Hz / 380 V 50 Hz				
Ambient conditions	+5 to +35 °C, ≤85% RH				

COMPACT CLIMATE TESTING

Benchtop Temperature Humidity Test Chamber

30 L · 50 L

Down to −70 °C | **10–98% RH**

Small benchtop chambers for simulating temperature and humidity environments, with a small footprint and stable performance. Used in electronics, automotive, battery, manufacturing, research and laboratories.



FEATURES

- ✓ Benchtop format with a small footprint, portable
- ✓ 30 L and 50 L chamber volumes
- ✓ Low-temperature versions: −20 °C, −40 °C, −60 °C or −70 °C
- ✓ Humidity range 10–98% RH
- ✓ Temperature-only or temperature and humidity versions
- ✓ Stable performance and full functionality in a compact unit
- ✓ For electronics, automotive, battery, manufacturing, research and laboratories

30 / 50 L
chamber volume

−70 °C
lowest temperature version

10–98% RH
humidity range

Detailed specifications on request
Contact us with your temperature, humidity and volume requirements and we send the matching configuration and datasheet.

THERMAL SHOCK

2-Zone Thermal Shock Test Chamber

TS-162 · TS-340 · TS-500 · TS-1000

+200 / −65 °C | **Recovery ≤ 15 min**

Moves the specimens between a hot and a cold zone to test function and service life under rapid temperature changes. Used in automotive, aerospace, electronics, battery, cable, pharmaceutical and materials testing.



FEATURES

- Smooth elevator transfer of samples between the cold and hot zones
- Temperature recovery time less than 15 minutes
- Programmable colour LCD touch screen controller
- Mechanical compression refrigeration system
- Casters, shelf and cable port as standard
- Interior lamp and large viewing window
- Adjustable and removable sample shelves
- Ethernet and USB (option)
- Safety protection system, CE mark

SPECIFICATIONS

Model	TS-162	TS-340	TS-500	TS-1000
Test zone, inner (mm)	300×300×250	450×450×360	650×650×500	850×850×700
Test zone volume	22 L	72 L	211 L	505 L
Test zone load	20 kg	30 kg	50 kg	60 kg
Overall dimensions (mm)	1560×870×1545	1710×1020×1845	1910×1220×2265	2110×1420×2665
Pre-heat zone	Upper limit +220 °C; ambient to +200 °C within 30 min			
Pre-cool zone	Lower limit −75 °C; ambient to −70 °C within 30 min			
High temperature exposure	Ambient +20 °C to +200 °C			
Low temperature exposure	−65 to −5 °C			
Recovery time	Within 15 min			
Temperature fluctuation / deviation	≤ ±0.5 °C / ≤ ±3 °C			
Controller	Programmable colour LCD touch screen controller			
Cooling system	Mechanical compression refrigeration			
Safety devices	Over-temperature, over-current, refrigerant high-pressure and earth leakage protection			
Exterior / interior	Steel plate with protective coating / SUS304 stainless steel			
Power supply	380 V 50 Hz			
Ambient conditions	+5 to +40 °C, ≤85% RH			

CORROSION

Salt Spray Corrosion Test Chamber

S-150 · S-250 · S-750 · S-010 · S-016 · S-020

ASTM B117 | ISO 9227

Tests the corrosion resistance and service life of products and coatings in an accelerated salt fog environment. Used in automotive, aerospace, electronics, paint, battery and marine applications.



FEATURES

- ✓ Temperature control and display unit
- ✓ Salt fog measurement and control
- ✓ Continuous or periodic salt spraying
- ✓ Transparent lid to observe the samples
- ✓ Sample holder with 8 round bars and 7 V-shaped grooves
- ✓ Spray tower adjustable in height and spray volume for different standards
- ✓ Quartz nozzles: easy to clean, resistant to heat, corrosion and clogging
- ✓ Water-sealed hood, casters as standard
- ✓ Standard and custom sizes, CE mark

SPECIFICATIONS

Model	S-150	S-250	S-750	S-010	S-016	S-020
Internal dimensions (mm)	470×590×400	640×1000×500	750×1100×500	1000×1300×600	900×1600×720	1000×2000×800
Overall dimensions (mm)	620×1400×1050	810×1800×1180	920×1900×1200	1200×2200×1400	1300×2500×1600	1420×3000×1850
Temperature range	Ambient to +60 °C					
Humidity range	95–98% RH					
Temperature fluctuation / deviation	±0.5 °C / ±2.0 °C					
Test time	1–999 h, settable					
Spray deposition	1–2 ml / 80 cm² · h					
Spray type	Continuous / periodic					
Controller	LED display, PID + SSR microcomputer controller					
Salt water preheating	Saturated air barrel					
Spraying system	Atomizer tower and spray nozzles for fine, uniform fog					
Material	Glass fibre reinforced plastic, interior and exterior					
Standard configuration	Sample bracket, sample holder, spray nozzle, fog collectors, measuring cylinder					
Safety devices	Over-temperature, water shortage, over-current and earth leakage protection					
Standards	ISO 3768 / 3769 / 3770, ISO 9227, ASTM B117, DIN 50021, JIS H8502, IEC 60068–2–11, IEC 60068–2–52, MIL-STD-750					
Power supply	220 V 50 Hz / 380 V 50 Hz					

WEATHERING

Xenon Arc Accelerated Weathering Test Chamber

XL-S-750

4500 W xenon lamp | **42 specimens**

Tests anti-ageing, colour change and service life of paints, coatings, plastics and textiles in an accelerated ageing environment: a xenon lamp simulates sunlight, water spray simulates wet conditions.



FEATURES

- Water-cooled xenon arc lamp
- Capacity for 42 specimens on a rotating specimen holder
- Irradiance measurement and control: 340 nm, 420 nm, 300–400 nm or 280–800 nm
- Measurement and control of black panel temperature (BPT), chamber temperature and relative humidity
- Programmable colour touch screen controller, Ethernet and USB
- Automatic water spray system, built-in water reservoir and automatic water supply
- Mirror-finish SUS304 stainless steel workroom, large viewing window
- Fast, accurate photoelectric radiometer
- Sample holders and casters as standard, safety protection system, CE mark

SPECIFICATIONS

Model	XL-S-750
Internal dimensions (D×W×H)	950×950×850 mm
Overall dimensions (D×W×H)	1300×1420×1800 mm
Specimen capacity	42 specimens, holder size 95×200 mm
Irradiation source	1 × 4500 W water-cooled xenon lamp, inner quartz and outer borosilicate filter
Irradiance range	35–150 W/m² (100–1200 W/m² at 280–800 nm)
Bandwidth measurement	300–420 nm
Chamber temperature	Ambient to +100 °C, ±2 °C
Black panel temperature	BPT 35–85 °C, ±2 °C
Relative humidity	50–98% RH, ±5% RH
Water spray cycle	1–9999 h 59 min, adjustable
UV radiometer	Tolerance ±5%
Controller	Programmable colour LCD touch screen controller, multi-language interface, Ethernet, USB
Safety devices	Humidifier dry-burn, over-temperature, over-current, refrigerant high-pressure, water shortage and earth leakage protection
Exterior / interior	Steel plate with protective coating / SUS304 stainless steel
Power supply	380 V 50 Hz
Standards	ISO 105-B02 / B04 / B06, ISO 4892–2, ISO 11341, AATCC TM16, TM169, ASTM G155, JIS L0843, SAE J1960 / J1885, JASO M346, PV 1303, IEC 61215, IEC 62688

WEATHERING

UV Weathering Resistance Test Chamber

UV-260 · UV-SI-260

UVA-340 / UVB-313 | **48 specimens**

Tests anti-ageing, colour change and service life of paints, coatings, plastics and textiles in an accelerated ageing environment: fluorescent UV lamps simulate ultraviolet radiation, water spray simulates wet conditions.



FEATURES

- 8 fluorescent UV lamps, 40 W each: UVA 340 nm or UVB 313 nm
- Controlled black panel temperature (BPT)
- Temperature from ambient to +90 °C
- Built-in water tank and automatic water supply
- PID programmable colour touch screen controller: 100 programs × 20 segments
- Ethernet and USB
- Irradiance control on the UV-SI-260
- Easy sample mounting and lamp change, sample holders and casters as standard
- Safety protection system, CE and RoHS compliant

SPECIFICATIONS

Model	UV-260	UV-SI-260
Internal dimensions (mm)	450×1170×500	
Overall dimensions (mm)	680×1300×1500	
Specimen capacity	48 specimens, 75×150 mm each	
Irradiation source	8 fluorescent UV lamps, 40 W each	
UV wavelength	290–400 nm	
Irradiance control	–	0.3–20 W/m² (340 / 313 nm)
Temperature range	Ambient to +90 °C, ±2 °C	
Humidity range	≥95% RH, ±2% RH	
Black panel temperature	BPT 30–80 °C	
Water spray	Yes	
Specimen to lamp distance	50 mm	
Controller	Programmable colour touch screen controller	
Nominal power	5000 W	5500 W
Power supply	380 V 50 Hz	

IP PROTECTION: DUST

IP5X IP6X Sand and Dust Test Chamber

DI-800 · DI-1000 · DI-1500 · DI-2000

IEC 60529 ISO 20653

For IP5X and IP6X dust ingress tests to IEC 60529 and ISO 20653. Talcum powder is circulated at a constant concentration through a wind tunnel, while the specimen can be powered and put under vacuum.



FEATURES

- Capacities of 800, 1000, 1500 and 2000 litres
- Constant dust concentration, dust blown through a wind tunnel and air outlet
- Built-in vacuum system for specimens
- Single-phase 16 A power interface in the workroom, power-on time and cycle set by the controller
- PID programmable colour touch screen controller: 100 programs × 20 segments
- Multi-language interface, USB and Ethernet
- Internal illumination, viewing window with wiper
- Strong stainless steel specimen shelves
- Safety protection system, standard and custom sizes, CE mark

SPECIFICATIONS

Model	DI-800	DI-1000	DI-1500	DI-2000
Internal dimensions (mm)	800×1000×1000	1000×1000×1000	1000×1500×1000	1000×2000×1000
Overall dimensions (mm)	1040×1450×1960	1200×1450×1960	1250×1900×1960	1300×2400×1960
Temperature range	Ambient to +50 °C			
Nominal wire diameter	50 μm			
Nominal gap between wires	75 μm			
Talcum powder amount	2–4 kg/m³			
Test time	0–99 h 59 min			
Fan cycle time	0–99 h 59 min			
Specimen power outlet	Dust-proof socket, AC 220 V 16 A			
Controller	Programmable colour LCD touch screen controller, multi-language interface, Ethernet, USB			
Safety devices	Electric leakage, short circuit, over-temperature, motor overheating and over-current protection; power-failure memory			
Exterior / interior	Steel plate with protective coating / SUS304 stainless steel			
Power supply	380 V 50 Hz			

IP PROTECTION: WATER

IPx1 IPx2 IPx3 IPx4 Drip and Spray Water Test Chamber

R-800C · R-1200C

IPx1–IPx4 | IEC 60529

One chamber for IPx1 to IPx4 water ingress tests to IEC 60529 and ISO 20653: dripping, spraying and splashing water. Typical specimens are communication equipment, outdoor lighting, automotive parts and motorcycle components.



FEATURES

- IPx1, IPx2, IPx3 and IPx4 tests in one chamber
- Stainless steel oscillating tube, swing range ±45°, ±60°, ±90° or ±180°, detachable nozzles
- Stainless steel drip tray with evenly distributed drip holes
- Water flow control and adjustment
- Circulation unit to save water, automatic water supply
- Waterproof power connector in the test room
- Programmable colour touch screen controller, USB and Ethernet
- Viewing window with wiper, internal illumination
- Safety protection system, CE mark

SPECIFICATIONS

Model	R-800C	R-1200C
Internal dimensions (mm)	800×800×800	1200×1200×1200
Overall dimensions (mm)	1020×1360×1560	1450×1450×2000
Oscillating tube radius	400 mm	600 mm
Spray hole diameter	Ø 0.4 mm	
Hole spacing	50 mm	
Oscillating tube swing angle	0 to ±180°, adjustable	
Drip tray	IPX1 / IPX2 drip nozzle diameter Ø 0.4 mm	
Turntable speed	1 r/min, stepless speed control optional	
Controller	Programmable colour LCD touch screen controller, multi-language interface, Ethernet, USB	
Safety devices	Electric leakage, short circuit, motor overheating and over-current protection	
Exterior / interior	Steel plate with protective coating / SUS304 stainless steel	
Power supply	380 V 50 Hz	
Standards	IEC 60529, ISO 20653	

IP PROTECTION: WATER

IPx9K High Pressure Water Spray Test Chamber

R9K-1200

IPX9K | Up to 88 °C water

For IPX9K tests: protection against high-pressure, high-temperature water jets. Four nozzles spray the specimen on a rotating turntable at 0°, 30°, 60° and 90°, 30 seconds per position.



FEATURES

- Rotating specimen turntable, 5 ±1 r/min, speed and angle adjustable
- Four nozzles at 0°, 30°, 60° and 90°, 30 s per position
- Mirror-finish SUS304 stainless steel workroom and turntable
- Single-phase 16 A power interface in the workroom for the specimen
- Circulation unit to save water, automatic water supply
- Waterproof power connector in the test room
- Programmable colour touch screen controller, USB and Ethernet
- Viewing window with wiper, internal illumination
- Safety protection system, CE mark

SPECIFICATIONS

Model	R9K-1200
Internal dimensions (D×W×H)	1000×1200×1000 mm
Overall dimensions (D×W×H)	1250×1700×2050 mm
Water spray temperature	Ambient to +88 °C, adjustable
Spray angles	0°, 30°, 60°, 90°
Spray nozzles	4, 30 s per position
Spray range	30° ±5° (single hole), spacing 100–150 mm
Nozzle to specimen distance	100–150 mm
Water pressure	8000–10000 kPa, adjustable
Water flow rate	14–16 L/min
Turntable speed	5 ±1 r/min
Turntable height / diameter	200–450 mm, adjustable / 600 mm
Load	≤ 100 kg
Controller	Programmable colour LCD touch screen controller, multi-language interface, Ethernet, USB
Protection and alarms	Power protection, timed automatic stop, water and motor overheating protection, automatic drainage at water over-temperature
Exterior / interior	Steel plate with protective coating / SUS304 stainless steel
Power supply	380 V 50 Hz

INTEON

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