

Climatic Chamber 1 (Temperature / Humidity & Vacuum):

Type:	ACS UD1000 C
Temperature range:	-70°C to +150°C
Precision (+/- °C):	0.5°C @ ambient pressure
Heating rate of change:	1.5°C/min avg. between ambient and +100°C
Cooling rate of change:	1°C/min avg. between ambient and -70°C
Humidity range (+20 to +80):	20 / 95% RH
R.H. precision:	+/- 3...5%
Vacuum range:	Ambient pressure to 1mBar
Useful internal dim (WxDxH):	1010 x 1010 x 1020 mm
Year:	2002

Climatic Chamber 2 (Low Temperatures):

Type:	Fryka B35-50
Temperature range:	-50°C to -10°C
Precision (+/- °C):	1°C
Useful internal dim (WxDxH):	425 x 300 x 280 mm
Year:	2020

Climatic Chamber 3 (High Temperatures):

Type:	Dry-Line DL-53
Temperature range:	Ambient temperature +5°C to 220°C
Precision (+/- °C):	0,4°C @150°C
Heating rate of change:	NA
Cooling rate of change:	NA
Useful internal dim (WxDxH):	401 x 401 x 330 mm
Year:	2011

Vibration equipment (shaker):

Type:	GW DSA4-4k & V400LT
Sine Force Peak:	6000 N
Random Force rms:	3900 N
Max Acceleration Peak: 75 g	
Max Velocity Peak:	1.27 m/s
Load support (w/ILS): 160kg	
First Major Resonance: 2700 Hz	+/-5%
Load Support Capacity: 160 kg	
Controller:	Spectral Dynamics (Puma)

Shock test equipment:

Type:	Lansmont Model 65/81 (free fall)
Table size (WxD):	81 x 65 cm
Maximum Acceleration:	600 g (bare table)
Min/Max pulse duration:	2 msec to 80 msec
Max velocity change:	7.62 m/sec
Pulse waveform:	Half Sine
Instrumentation:	Acceleration monitoring w/ instrumentation trigger

EMC CHAMBER

3M Semi Anechoic Chamber for IEC 61000-4-3 Radiated Immunity and Compliant Radiated Emission testing:

Type: 3M Semi Anechoic Chamber for IEC 61000-4-3
Radiated Immunity and Compliant Radiated Emission
testing, Euroshield/ETS Lindgren.
Antenna mast: Scan height 1-4 m Model 2075-2 MiniMast
Turntable: LOPRO Model 2065-1.2, diameter 1,22m, max load 273kg
Size Shielding: 7840x5280x5360
1 Feed through panel:
4 Floor Access panels: 300x300 (2 stk), 300x400, 400x400
AC voltage: fix 230V, Adjustable AC from 90V to 250V
RF signal cable: RF signal inside the chamber

Temperature and humidity controller is installed.

Receiver: HP 8591E (QP detector) (9kHz – 1.8GHz)
Measurement SW: DARE Radimation Version 5.1.24
LISN: EMCO Model 3810/2 50Ω 50/250uH (9kHz – 30MHz)
Antenna: YORK/SCHAFFNER Bilog Antenna CBL 6112B (30MHz – 2GHz)
Cables: Pasternack RG 223/U 50Ω

ESD Testing

- EM Test ESD generator

Immunity test equipment

Best EMC from Schaffner to simulate:

- EFT/Burst
- Surge
- Voltage drops & interrupts
- Burst for Cable Clamp
- Harmonics and flicker