

Pre-qualification testing facilities

Test facilities available for product development assessment and confidence testing

TEST CAPABILITIES

- EMC
- Hot / cold temperature
- Humidity
- Low / high pressure
- Corrosion / water ingress
- Centrifuge
- Accelerated component exercising
- Vibration
- Contamination
- Force measurement

Our in-house product assessment and confidence testing facilities provide a wide range of test capabilities to assist in identifying component infant mortalities and gain confidence in product design. These include various environmental chambers with humidity, temperature and pressure controls, salt corrosion, centrifuge generators, contamination chambers, vibration testing (to very high levels), accelerated component exercising, EMC chambers of varying sizes, and a Hounsfield force measurement facility.

Whilst we do not have the capability for full product qualification testing, the facilities provide a cost effective means for pre-qualification testing and therefore minimise the use of expensive test houses.

All the equipment is available with support from the equipment manager to assist with testing and provide technical support.

Benefits

- Flexible equipment booking system
- Technical support available during testing
- Experience in assessing products to various military design standards
- Basic monitoring facilities included
- Wide range of testing equipment available

Technical data

EMC

- Conducted emissions on power and signal lines (10kHz to 150MHz)
- Exported Transients, DC Power lines only
- Audio susceptibility on power lines
- RF bulk current injection - low level (100dbua) capability over limited frequency range with manually swept RF signal
- Radiated emissions e-field (30MHz to 1GHz)

Low / High Temp Chambers (4 x varying sizes)

- Size: 610mm x 610mm x 914mm (largest chamber)
- Temp: -70°C to +175°C

Humidity Chambers (2 x varying sizes)

- Size: 1000mm x 1000mm x 1000mm (largest chamber)
- Temp: -40°C to +100°C
- RH Range: 10% to 95% depending on temperature

Bench Top Temperature Chamber

- Size: 381mm x 381mm x 457mm
- Temp: Ambient to +300°C

Temperature/Altitude/Humidity Chamber

- Size: 610mm x 610mm x 610mm
- Temp: -60°C to +150°C
- Alt: Sea Level to 60,000 feet
- RH Range: 35 to 95%, 30°C to 85°C

Vacuum Chamber

- Size: 610mm (D) x 610mm (L)
- 30 electrical connections
- Altitude Simulation to 100,000ft

LDS V875LS-440T LPT600C SPA40K Vibration System (with slip table)

- Ø440mm armature
- 35kN thrust
- Sine & random mode

LDS V850 Vibration Table with alternative 440mm & 240mm armature with SPA32KVA amplifier (with slip table)

- Ø440mm armature, 22kN thrust
- Ø240mm armature, 17kN thrust
- Sine & Random mode



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Bespoke advanced monitoring facilities can be designed on request. Additional test facilities are also available.

Ultra Electronics reserves the right to vary these specifications without notice.

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