

MIMOS Reliability Lab

OUR QUALITY POLICY

A recognised Standard Quality Management System

Maintain a quality system to meet or exceed the requirements of ISO/IEC 17025:2005

Conform to customer requirements

Perform all testing in conformance with customer requirements and stated test method.

World-class testing services

Provide world-class testing services in the most professional manner possible, every time

Operational excellence

Maintain a working knowledge of the quality systems and implement them in our day-to-day work

Continuously improve

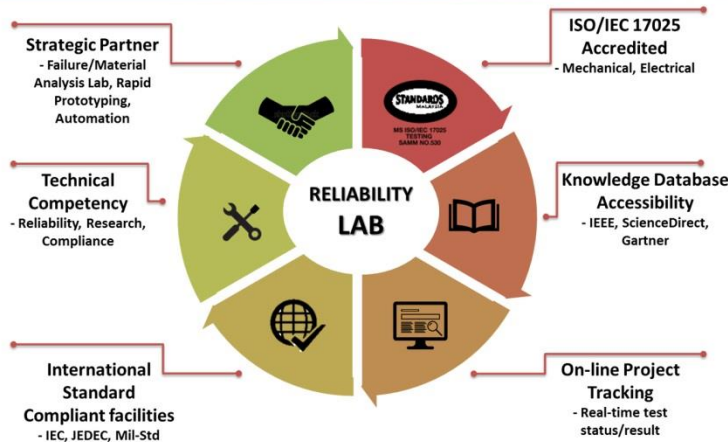
Continuously improve the efficiency and effectiveness of our quality management system

MIMOS Reliability Lab was established in 2009 with the mission to provide strategic internationally-compliant reliability testing services.

The lab provides comprehensive technical support for a wide range of industries including telecommunications, automotive, consumer electrical and electronics products and appliances for multinational corporations, local industries and universities.

The lab has been accredited with MS ISO/IEC 17025 Testing Lab Competency by Standards Malaysia (DSM) for mechanical and electrical field of scope.

OUR STRENGTHS



SERVICES OFFERED

Research and Technical Consultation

- o Reliability Test Plans and Assessments
- o Accessibility to various international publications and databases
- o Reliability Training

Testing Customization

- o Custom test methods, fixtures or equipment to meet any unique specifications

Testing Service

- o Comprehensive state-of-the-art equipment
- o Test facilities in compliant with various standards such as IEC, JEDEC and Mil-Std
- o Tests for qualification, pre-compliance, benchmarking, warranty analysis or characterisation
- o Online project tracking for testing timeline and result monitoring

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MS ISO/IEC 17025 TESTING SAMM NO.530

Testing Capabilities

Environmental Testing

Determines the resistance of a product to various environmental conditions during storage, transportation and operation. This applies to the ability of a product to withstand stresses related to rapid temperature change, hot, cold and high humidity weather, rain, direct sunlight or sea mist.

- Temperature/Humidity Cycling Chamber (-70°C to 180°C, and up to 98%RH)
- Thermal Shock Chamber for air-to-air rapid thermal change (-80°C to 180°C)
- Combined Temperature/Humidity/Vibration (-70°C to 180°C, up to 98%RH and max 30GRMS)
- Autoclave Chamber (105°C to 150°C, max 2 bar pressure and up to 100%RH)
- High Temperature Ovens (25°C to 300°C)
- Salt Spray Chamber for corrosion testing, complies to ISO9227, ASTM B117, IEC60068-2-11/52, JIS Z 2371
- Blowing Rain Chamber simulates light and heavy rain with wind up to 40mph, complies to Mil-Std 810 Method 506
- Xenon Weather-Ometer for solar radiation testing, complies to ASTM G155.

Mechanical Testing

Determines the products' mechanical properties such as robustness of housing materials and sealing mechanism, against dynamic stresses during storage, transportation and operation

- 3-Axis Electro-dynamic Shaker for resonance check, shock, random and sinusoidal waveforms (5-2000Hz at max 30GRMS)
- Drop Tester for free fall testing on a concrete or steel plate surface (up to 1m in any direction, max 85kg load)
- Ingression Protection Tester for water testing, complies to IEC60529 (water jet IPX5 and IPX6, immersion tank IPX7)
- Impact Tester for material ruggedness (up to 1kg in 1m fall)
- Material Strength Test using INSTRON Test System (5KN and 50KN load-cell)



Electrical Testing

Determines the product capability in meeting safety requirements.

- Electrostatic Discharge (ESD) Tester for air discharge and contact (up to 30KV – complies to IEC61000-4-2)
- Electrical Safety Test
 - Insulation Resistance
 - Overload Protection
 - Short-Circuit Strength



Specialised Testing

Tools designed per product or end-user application such as for usability, life cycle, simulation jig for manufacturing and greenhouse application.

- Cyclic Latch/Unlatch
- Switch and Joystick Life Cycle
- Chemical Resistance Test
- Flex 10-pin Connectivity Tester
- Water Pressure Pipe Endurance Test



Reliability Analysis Software

Reliability analysis tools for statistical calculation on estimated product life, sample sizes and setting survival requirements.

- Weibull++7 for reliability life data analysis
- ALTA 7 for accelerated life test design and analysis



Support Tools

Utilises various tools for advanced data monitoring

- Universal Data Logger
- 3D Measuring Smart-scope with 0.5 micron resolution
- High-Speed Camera with up to 4K frame/sec images
- Thermal Imaging System
- Sound Level Meter

