



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

DATASYST ENGINEERING & TESTING SERVICES, INC.

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MECHANICAL

Valid To: December 31, 2019

Certificate Number: 2107.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests on mechanical assemblies and electrical components:

Test(s)/Test Parameters:

Vibration¹

Sine, Random, Sine-on-Random
Combined Environment
DC up to 3,000 Hz
Up to 30,000 Force Pounds
(-73 to 177) °C
(30% to 80%) RH
Shock: 50g's 6ms

Test Method(s):

ETSI EN 300 019-2-2 v.2.1.2,
ETSI EN 300 019-2-3 v.2.1.3;
IEC 60068-2-6,
IEC 60068-2-64;
MIL-STD-202G Method 201A, 204D, 214,
MIL-STD-810 (D, E, F, G) Method 514,
MIL-STD-883E Method 2005.2, 2007.2,
MIL-STD-1344A Method 2005;
RTCA/DO-160 E Section 8;
SAE J1211 Section 4.7,
SAE J1455 Section 4.10;
GR-63-CORE Section 5.4.2, 5.4.3, 4.4.3

Mechanical Shock¹

Pulse (0.1 to 700) g's
Temperature (-73 to 177) °C
Humidity (5 to 95) % RH

ETSI EN 300 019-2-2 v.2.1.2,
ETSI EN 300 019-2-3 v.2.1.3;
GR-63-CORE Section 5.3;
IEC 60068-2-27;
MIL-STD-202G Method 213B,
MIL-STD-810 (D, E, F, G) Method 516,
MIL-STD-810F Method 519,
MIL-STD-883E Method 2002,
MIL-STD-1344A Method 2004;
RTCA/DO-160 E Section 7;
SAE J1211 Section 4.8,
SAE J1455 Section 4.11

Test(s)/Test Parameters:

Mechanical Impact¹

Drop up to 5 ft

Durability/Mechanical Cycling¹

Force up to 30,000 lbs

Displacement up to 10 in

Velocity 35 in/s

Environmental Simulation¹

Temperature

(-73 to 177) °C

Thermal Shock

(-73 to 177) °C within 3 seconds

Temperature and Humidity

@50°C 5 %RH

@30°C 95 %RH

Temperature/Altitude¹

(0 to +177) °C

Sea Level to 40,000 feet or 24 inches Hg

Immersion

Immersion and Splash

Packaged Products for Parcel Delivery Systems

Strain Gage Application (Installation of Bonded Resistance Strain Gages)

Test Method(s):

CFR 49 Para. 178.603

MIL-STD-1344A 2009, 2010

IEC 60068-2-1;

MIL-STD-883E, Methods 1005, 1006, 1007, 1008,

MIL-STD-1344A Method 1005, MIL-STD-781;

RTCA/DO-160 E Section 5;

SAE J1211 Section 4.1,

SAE J1455 Section 4.1

MIL-STD-883E Method 1010,

MIL-STD-1344A Method 1003

ETSI EN 300 019-2-1 v.2.1.2;

IEC 60068-2-28,

IEC 60068-2-30;

IEC 60068-2-38;

MIL-STD-202G Method 103B,

MIL-STD-1344A Method 1002;

SAE J1211 Section 4.2,

SAE J1455 Section 4.2;

RTCA/DO-160 E Section 6

GR-63-CORE 5.1;

MIL-STD-883E Method 1001;

RTCA DO 160 E Section 4;

SAE J1211 Section 4.6,

SAE J1455 Section 4.9

MIL-STD-883E Method 1002,

MIL-STD-810F Method 512

MIL-STD-1344A Method 1016;

SAE J1211 Section 4.4,

SAE J1455 Section 4.4

ISTA 1A, 1B, 1C, 1D, 1E, 1F, 1G, 2A, 2B, 2C, 3A,

3B, 3E, 3F, 4A, 4B, 6, 7D

ASTM E1237



Test(s)/Test Parameters:

Voltage¹

VDC: 6000 V

VAC: 5000 V

Test Method(s):

SAE J1455 4.13.1

¹This laboratory also uses customer supplied specifications directly related to the types of tests and within the parameters listed above



Accredited Laboratory

A2LA has accredited

DATASYST ENGINEERING & TESTING SERVICES, INC.

Delafield, WI

for technical competence in the field of

Mechanical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



Presented this 21st day of February 2018.

A handwritten signature in black ink, written over a horizontal line.

President and CEO
For the Accreditation Council
Certificate Number 2107.01
Valid to December 31, 2019

For the types of tests to which this accreditation applies, please refer to the laboratory's Mechanical Scope of Accreditation.