



**ENVIRONMENTAL TESTS CONDUCTED**  
**ON EXCALIBUR SYSTEMS' IN-LINE COUPLERS**

A total of 8 test samples were used as specified in MIL-PRF-21038. The test samples were grouped into three groups and subjected to the various tests as follows.

<b>Test</b>	<b>Test Limits</b>	<b>Test Date</b>	<b>Test Performed By</b>
<b>Group I All Samples (8)</b>			
Electrical Characteristics at ambient	Excalibur ATP & MIL-STD-1553	15/6/16	Excalibur Systems
Dielectric Withstand	MIL-STD-202 method 301 500 VAC, 2 mA leakage max.	16/6/16	QualiTech Testing Labs.
Insulation Resistance	MIL-STD-202 method 302 500 VDC, 1000 MOhms min.	16/6/16	QualiTech Testing Labs.
Electrical Characteristics at -55 °C	Excalibur ATP & MIL-STD-1553	19/6/16	Excalibur Systems
Electrical Characteristics at +125 °C	Excalibur ATP & MIL-STD-1553	20/6/16	Excalibur Systems
Visual & Mechanical	Excalibur Assembly Instruction	20/6/16	Excalibur Systems
Pull Strength	MIL-STD-202G, Method 211A. Test Condition A Steady load of 12 lbs. on each cable	21/6/16	Excalibur Systems
Electrical Characteristics at ambient	Excalibur ATP & MIL-STD-1553	21/6/16	Excalibur Systems
<b>Group II ( 2 Samples)</b>			
Life	MIL-STD-202, method 108. 1000 hours at 125 °C, operating MIL-STD-1553	23/6/16	Excalibur Systems
Dielectric Withstand	MIL-STD-202 method 301 500 VAC, 2 mA leakage max.	4/08/2016	QualiTech Testing Labs.
Insulation Resistance	MIL-STD-202 method 302 500 VDC, 1000 MOhms min.	4/08/2016	Excalibur Systems
Electrical Characteristics at ambient	Excalibur ATP & MIL-STD-1553	4/08/2016	Excalibur Systems

Test	Test Limits	Test Date	Test Performed By
Group III ( 6 Samples)			
High Frequency Vibration	MIL-STD-202, Method 204, condition B, 12 hours per axis	5/08/2016	QualiTech Testing Labs.
Mechanical Shock	MIL-STD-202, Method 213, condition J	5/08/2016	QualiTech Testing Labs.
Thermal Shock	MIL-STD-202G, Method 106G. -40 °C to +125 °C, 10 cycles	17/08/2016	QualiTech Testing Labs.
Moisture Resistance	MIL-STD-202, method 106. -10° C to 65°, 10 cycles	18/08/16	QualiTech Testing Labs.
Salt Atmosphere	MIL-STD-202G, Method 101E, Condition D. 240 hours.	29/08/2016	QualiTech Testing Labs.
Electrical Characteristics at ambient	Excalibur ATP & MIL-STD-1553	29/08/2016	QualiTech Testing Labs.
Altitude Immersion Test	Mil-Std-1344A, Method 104.1	25/04/2017	QualiTech Testing Labs.
Resistance to solvents ( 3 samples, one for each fluid)	MIL-STD-202, method 106	19/12/2016	Dayton T. Brown ENGINEERING AND TEST DIVISION

