

## Testing Summary 7160-0318 Rev AA CF-31 Docking Station

Summary of Tests Performed at Gamber-Johnson

Test Description	Test Parameters
Vibration –	MIL-STD-810G, Method 514.6, Procedure 1, Category 4, per Figure
Operational	514.6C-1. Test duration is two 1- hour cycles along three mutually
Test date: August 2013	orthogonal axes – not simultaneously (6 hours total).
	Unit is unlocked
	Panasonic provided operating conditions
Vibration –	MIL-STD-810G, Method 514.6, Procedure 1, Category 4, per Figure
Operational	514.6C-1. Test duration is one hour along three mutually orthogonal
<b>RF</b> Connection	axes – not simultaneously (3 hours total).
Test date: August 2013	Unit is unlocked
	Panasonic provided operating conditions
	• Test is performed simultaneously with operational test.
	• Test is monitored to record any breaks in RF connectivity during
	vibration.
Vibration –	MIL-STD-810G, Method 514.6, Category 24, per Figure 514.6E-1. Test
Non-Operational	duration is one hour along three mutually orthogonal axes – not
(Minimum Integrity)	simultaneously (3 hours total).
Test date: August 2013	Unit is unlocked
	<ul> <li>Panasonic provided operating conditions</li> </ul>
Vibration –	10-200Hz Sine Sweep
Non-Operational	Unit is unlocked
Sinusoidal	Panasonic provided operating conditions
Test date: August 2013	
Functional Shock -	MIL-STD-810G, Method 516.6, Procedure 1, 3 positive and 3 negative
Non-Operational	pulses each axis (vertical, longitudinal and transverse), 18 pulses
Test date: August 2013	• 20G, 11ms half sine
	Unit is unlocked
Mechanical Shock	MIL-STD-810G, Method 516.6, Procedure 1, 3 positive and 3 negative
Safety -	pulses each axis (vertical, longitudinal and transverse), 18 pulses
Non-Operational	• 40G, 11ms half sine
Test date: August 2013	Unit is unlocked
Cycle Testing –	10,000 cycles of the docking connector, latching and locking
Non-Operational	mechanisms
Test date: August 2013	

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Summary of Tests Performed at Independent Facility			
Test Description	Test Parameters		
Shock – Crash	SAE J1455, Section 4.11.3.5, per Figure 13		
Hazard	Unit is unlocked		
Test date: August 2013			
Thermal Shock	MIL-STD 810G, Method 503.5, Procedure I-C		
Test date: August 2013	<ul> <li>Three cycles from 85°C to -40°C to 85°C</li> </ul>		
Low Temperature:	MIL-STD 810G, Method 502.5, Procedure II		
Operational	<ul> <li>-10°C Operating, 2-hour duration</li> </ul>		
Test date: August, 2013			
Low Temperature:	MIL-STD 810G, Method 502.5, Procedure l		
Storage	<ul> <li>-51°C Non-Operating, 4-hour duration</li> </ul>		
Test date: August, 2013			
High Temperature:	MIL-STD 810G, Method 501.5, Procedure II, Table 501.5-II, Induced		
Operational	Conditions		
Test date: August, 2013	<ul> <li>Three 24-hour cycles, temperature varied from 30°C to 60°C to</li> </ul>		
	30°C		
High Temperature:	MIL-STD 810G, Method 502.5, Procedure I, Table 502.5-III, Induced		
Storage	Conditions		
Test date: August, 2013	• Seven 24-hour cycles, temperature varied from 33°C to 71°C to		
	33°C		
EMC Testing	EN 50498:2010		
Test date: August 2013	<ul> <li>Tests performed at independent facility</li> </ul>		
EMC Testing Test date: August 2013	EN 55022:2010/AC:2010		
	CISPR 22 – Class A		
	<ul> <li>FCC Part 15, Subpart B – Class A</li> </ul>		
	<ul> <li>Tests performed at independent facility</li> </ul>		

## Summary of Tests Performed at Independent Facility

## **Other Certifications**

Description	
EN 50581:2012 RoHS2 Directive 2011/65/EU	

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