

TESTING SUMMARY

TrimLine Dock and Cradle for Panasonic CF33 Laptop

(AS7.P033.500 | AS7.P033.502 | AS7.P033.510 | AS7.P033.512 | AS7.P033.504 | AS7.P033.514 |

AS7.P033.522)

Test Description	Test Parameters
Vibration: Operational	MIL-STD-810G, Method 514.6, Procedure 1, Category 4, per Figure
Test date: Sep 2019	514.6C-1. Test duration is one hour along three mutually orthogonal axes – not
(performed in both tablet	simultaneously (6 hours total). Tested after non-operational vibration on 3 axis.
and laptop mode)	Unit is unlocked
	Panasonic provided operating conditions
	 RF connection is also monitored during the test.
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Vibratian, Nan	• Test is monitored to record any breaks in RF connectivity during vibration.
Vibration: Non-	MIL-STD-810G, Method 514.6, Category 24, per Figure 514.6E-1. Test duration is
Operational	one hour along three mutually orthogonal axes – not simultaneously (3 hours
Test date: Sep 2019 (performed in both tablet	total).
and laptop mode)	• Unit is unlocked
Mechanical Shock	MIL-STD-810G, Method 516.6, Procedure 1, 3 positive and 3 negative pulses along
Safety: Non-Operational	three mutually orthogonal axes (6 hours total).
Test date: Sep 2019	• 20G, 11ms half sine
(performed in both tablet	• 40G, 11ms half sine
and laptop mode)	• Unit is unlocked
Cycle Test: Non-	30,000 cycles of the docking connector, latching and locking mechanisms
Operational	
Test date: Oct 2019	
Shock – Crash Hazard:	SAE J1455, Section 4.11.3.5, per Figure 13
Non-Operational	• Unit is unlocked
Test date: Sep 2019	 Unit is tested in front to back and side to side orientations
(performed in both tablet	
and laptop mode)	ICO 40005, Castian O, Tabla C.2, Catagana 2, Direct Air Discharge
Electrostatic Discharge: Test date: Oct 2019	ISO 10605, Section 8, Table C.2, Category 2 – Direct Air Discharge
	Operational
EMC Testing Test date: Sep 2019	• CFR Title 47 FCC Part 15
Test date: sep 2019	• ICES-003 Issue 6
	• CISPR 32/EN 55032:2012/AC:2013
	AS/NZS CISPR 32
	• VCCI 32-1
	• EN 50498:2010
Electrical Safety Testing	• CSA C22.2 No. 60950-1
Test date: Sep 2019	• UL 60950-1
Low Temperature:	MIL-STD 810G, Method 502.5, Procedure ll
Operational	 -10°C Operation, 24-hours
Test date: Sep 2019	
Low Temperature:	MIL-STD 810G, Method 502.6, Procedure l
Storage	 -40°C Non-Operational, 72 hours
Test date: Sep 2019	

High Temperature:	MIL-STD 810G, Method 501.5, Procedure II, Table 501.5-II, Induced
Operational	Conditions
Test date: Sep 2019	• Five 24-hour cycles, temperature varied from 30°C to 63°C to 30°C
High Temperature:	MIL-STD 810G, Method 501.5, Procedure I, Table 501.6-III, Induced
Storage	Conditions
Test date: Sep 2019	• 85°C Non-Operational, 72 hours
Thermal Shock	MIL-STD 810G, Method 503.5, Procedure I-C
Test date: Sep 2019	• Fifty cycles from 85°C to -40°C to 85°C; Dwell Time of 2 hours at each temp.
Humidity	MIL-STD 810G, Method 507.5, Procedure II, Aggravated, Table 507.5- IX
Test date: Sep 2019	• Ten 24-hour cycles, temperature varied from 30°C to 60°C to
	30°C at constant 95% relative humidity.
RoHS Compliance	EN 50581:2012 RoHS2 Directive 2011/65/EU
Date: Apr 2019	



Conforms to CSA C22.2 No. 60950-1-07, UL 60950-1