



TESTING SUMMARY – 2023-05-18
Trimline Dock and Cradle for Panasonic G1/G2 Tablet
(AS7.P201.1xx Series Docks and Cradles)

Test Description	Test Parameters
Vibration Non-Operational <i>Test date: May 2022</i>	MIL-STD-810G CHG1, Method 514.6, per Figure 514.6E-1, and in accordance with PSD values in Graph A of Panasonic specification “Toughbook Tested for Vehicle Dock Partners Version 3.1” 2019-07-03., Section [A-1], . Test duration is one hour along three mutually orthogonal axes – not simultaneously (3 hours total). <ul style="list-style-type: none">• Unit is unlocked
Vibration Operational <i>Test date: May 2022</i>	MIL-STD-810G CHG1, Method 514.6, per Figure 514.6C-1, and in accordance with PSD values in Graph B of Panasonic specification “Toughbook Tested for Vehicle Dock Partners Version 3.1” 2019-07-03., Section [A-1]. Test duration is two hours along three mutually orthogonal axes – not simultaneously (6 hours total). <ul style="list-style-type: none">• Unit is unlocked
Mechanical Shock Safety: Non-Operational <i>Test date: May 2022</i>	MIL-STD-810G CHG1, Table 516.6-II, 3 positive and 3 negative pulses along three mutually orthogonal axes (18 shocks in total), and per Panasonic specification “Toughbook Tested for Vehicle Dock Partners Version 3.1” 2019-07-03., Section [A-2] SHOCK Test. AND, in accordance with section 4.3 of Gamber-Johnson’s Product Validation Testing Specification (Rev C). Wave pulses are injected in two directions per axis and three cycles per direction for a total of 18 pulses, for each (40G and 20G). <ul style="list-style-type: none">• 40G, 11ms half sine – Pass criteria Tablet does not eject• 20G, 11ms half sine – Indicators that the tablet is charging and is docked as well as sound are monitored before and after the test
Shock – Crash Hazard: Non-Operational Test <i>Test date: Nov 2022</i>	SAE J1455, Test Method 4.11.3.5, Figure 13, and Panasonic specification “Toughbook Tested for Vehicle Dock Partners Version 3.1” 2019-07-03., Section [A-2] SLED Test <ul style="list-style-type: none">• Unit is unlocked
Cycle Test: Non-Operational <i>Test date: Jan 2023</i>	30,000 cycles of the docking connector, and latching mechanisms as per Panasonic specification “Toughbook Tested for Vehicle Dock Partners Version 3.1” 2019-07-03., Section [A-3]
Sharp Edge Test <i>Test date: Jan 2023</i>	The test conducted as per Panasonic specification “Toughbook Tested for Vehicle Dock Partners Version 3.1” 2019-07-03., Section [A-5] using sharp edge tester.
Low Temperature: Operational <i>Test date: Nov 2022</i>	MIL-STD 810G CHG1, Method 502.6, Procedure II <ul style="list-style-type: none">• -10°C, Duration 24 h, Operational
Low Temperature: Storage <i>Test date: Nov 2022</i>	MIL-STD 810G CHG1, Method 502.6, Procedure I, and as per Panasonic specification “Toughbook Tested for Vehicle Dock Partners Version 3.1” 2019-07-03., Section [A-6] <ul style="list-style-type: none">• -40°C, Soak Duration 72 h, Non-Operational
High Temperature: Operational <i>Test date: Dec 2022</i>	MIL-STD 810G CHG1, Method 501.6, Procedure II <ul style="list-style-type: none">• 63°C, Duration 120 h, Operational
High Temperature: Storage <i>Test date: Nov 2022</i>	MIL-STD 810G CHG1, Method 501.6, Procedure I, and as per Panasonic specification “Toughbook Tested for Vehicle Dock Partners Version 3.1” 2019-07-03., Section [A-6] <ul style="list-style-type: none">• 85°C, Soak Duration 72h, Non-Operational

Thermal Shock <i>Test date: Nov 2022</i>	Basic Standard: MIL-STD-810G CHG1 Section: 503.6, and as per Panasonic specification "Toughbook Tested for Vehicle Dock Partners Version 3.1" 2019-07-03., Section [A-6] Limits: Low Temperature -40 °C High Temperature 85 °C 50 Cycles Transfer Time < 1 min Dwell time (at each temperature) 2 h
Humidity <i>Test date: Nov 2022</i>	MIL-STD 810G CHG1, Method 507.6, Procedure II, • 10 cycles of 24 hr, ranging from 30°C to 60°C at 95%RH, Non-Operational
Electrostatic Discharge: Operational <i>Test date: Jan 2023</i>	ISO 10605, Section 8, Table C.2, Category 2 – Direct Air Discharge, and as per Panasonic specification "Toughbook Tested for Vehicle Dock Partners Version 3.1" 2019-07-03., Section [B-1]
EMC Testing <i>Test date: Oct 2022</i>	Panasonic specification "Toughbook Tested for Vehicle Dock Partners Version 3.1" 2019-07-03., Section [B-2], and as per: • FCC Part 15, Subpart B • ICES-003 Issue 6 • CISPR 32 • EN 50498:2010
RoHS Compliance	EN IEC 63000:2018, RoHS3 Directive 2015/863 as per Panasonic specification "Toughbook Tested for Vehicle Dock Partners Version 3.1" 2019-07-03., Section [C-1]
UL-94 Flammability Compliance	• UL-94 • EN IEC 60950-1 50498:2010 as per Panasonic specification "Toughbook Tested for Vehicle Dock Partners Version 3.1" 2019-07-03., Section [C-2]
Electrical Safety testing <i>Test date: Feb 2023</i>	• cQAlus Certification: CSA C22.2 No. 62368-1:19 and UL 62368-1 3 rd ED Part-1 • IEC 62368-1:2018



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