



Dell Pro 15 Essential Durability Testing Report



Summary of Independent Environmental Testing.

Test name	Test procedure
Tests performed	MIL-STD-810H testing
Equipment tested	Dell Pro 15 Essential PV15255
Independent testing facilities	Dell Pro 15 Essential AMD (PV15255)
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Notes

All environmental testing listed in the accompanying tables was performed and reported independently by accredited testing companies.

Documented MIL-STD-810H, testing guidelines were followed. All tests were performed with I/O and expansion doors closed, unless otherwise noted. A summary listing of tests appear in the tables included in this document.

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Dell Pro 15 Essential MIL-STD-810H Environmental Testing

MIL STD TEST SPEC	TEST NAME	TEST PARAMETERS	PV15255 (AMD)
MIL-STD-810H, Method 500.6, Procedure I	Altitude – Storage / Air Transport	1 hour constant temperature exposure 21°C, 15,000 feet, Non-Operating	Pass
MIL-STD-810H, Method 500.6, Procedure II	Altitude – Operational / Air Carriage	1 hour constant temperature exposure 21°C, 15,000 feet, Operating	Pass
MIL-STD-810H, Method 501.7, Procedure I	High Temperature – Induced (Storage and Transition) Conditions	Table 501.7-III. High temperature cycles, climatic Category A1 – Hot Dry, Induced (Storage and Transit) Conditions, 7 cycles, Non-Operating	Pass
MIL-STD-810H, Method 501.7, Procedure II	High Temperature – Operation Cycling Temperature Exposure	Table 501.7-III. High temperature cycles, climatic category A1 – Hot Dry, Ambient Air Conditions, 5 cycles, Operating	Pass
MIL-STD-810H, Method 502.7, Procedure I	Low Temperature – Storage	24 hours constant temperature exposure -51°C, Non-Operating	Pass
MIL-STD-810H, Method 502.7, Procedure II	Low Temperature – Operational	24 hours constant temperature exposure -29°C, Operating	Pass
MIL-STD-810H, Method 507.6, Procedure I	Humidity – Storage & Transit Cycles and Natural Cycles	Table 507.6-II, Induced B3 and Nature B3, 15 cycles exposure Induced B3, Non-operating and 15 cycles exposure Natural B3, Operating	Pass
MIL-STD-810H, Method 510.7, Procedure I	Sand and Dust – Blowing Dust	Non-Operating at (25 ± 10) °C, 6 hours Operating at (60 ± 2) °C, 6 hours Dust concentration: (10 ± 7) g/m ³ Air flow velocity: 8.9 m/s	Pass
MIL-STD-810H, Method 514.8, Procedure I, Table 514.8C-II Category 4	Vibration	Table 514.8C-II. Category 4 – Common carrier for unknown orientation, 1 hour/axis, total 3 hours, Operating	Pass
MIL-STD-810H, Method 514.8, Procedure I, Category 24	Vibration – Minimum Integrity Test	Figure 514.8E-1, Category 24 – General minimum integrity exposure, 1 hour/axis, total 3 hours, Non-Operating	Pass
MIL-STD-810H, Method 516.8, Procedure I	Shock – Functional Shock	Table 516.8-IV, Terminal peak sawtooth pulse 40g, 11ms, 1 shock/axis, total 6 shocks, Operating	Pass
MIL-STD-810H, Method 516.8, Procedure II	Shock – Transportation Shock	Table 516.8-VII, On Road and Off Road, Terminal peak sawtooth, Non-Operating	Pass
MIL-STD-810H, Method 516.8, Procedure V	Shock – Crash Hazard Shock	Table 516.8-XIII, Terminal peak sawtooth pulse (1) 40g 11ms; (2) 75g, 6ms 2 shocks/axis/condition, total 24 shocks, Non-Operating	Pass
MIL-STD-810H, Method 516.8, Procedure VI	Shock – Bench Handling	The lifted edge of the chassis has been raised 100 mm (4 in) above the horizontal bench top, total 4 drops, Non-Operating	Pass

Pass criteria and test scope information

For operational tests, a pass indicates that the unit remained operational during the entirety of the test. For non-operational tests, a pass indicates that a functional verification was performed immediately after the test exposure, in which the unit was powered on and booted to the primary operating system. Cosmetic damage does not constitute a failure unless there is a safety concern. Sample sizes tested are not statistically significant.