

MIL-STD-810G test results

This is designed to test equipment limits in various conditions where it is expected to be used (environment) or transported (shocks). An independent third-party laboratory has tested certain products using recommended test methods.

| | Surface Laptop 2 | Surface Pro 6 |
|-----------------------------|------------------|---------------|
| Model number | 1769 | 1796 |
| Test | | |
| High Altitude Operating | PASS | PASS |
| High Altitude Storage | PASS | PASS |
| Humidity | PASS | PASS |
| High Temperature Storage | PASS | PASS |
| High Temperature Operating | PASS | PASS |
| Vibration Minimum Integrity | PASS | PASS |
| Vibration Ground Vehicle | PASS | PASS |
| Low Temperature Operating | PASS | PASS |
| Low Temperature Storage | PASS | PASS |
| Shock Operational | PASS | PASS |
| Crash Hazard Operational | PASS | PASS |
| Drop Benchtop | PASS | PASS |
| Drop Transit [modified 30"] | PASS | PASS |
| Blowing Dust | PASS | PASS |
| Temperature Shock | NO | PASS |
| Freeze/Thaw | PASS | PASS |
| Blowing Sand | PASS | NO |
| Explosive Atmosphere | PASS | PASS |



| | Surface Laptop | Surface Pro 5 LTE |
|---------------------------------------|----------------|-------------------|
| Model number | 1769 | 1807 |
| Test | | |
| Thermal Shock | NO | NO |
| Humidity | PASS | PASS |
| Explosive Atmosphere | | PASS |
| High Temperature Storage (Constant) | PASS | PASS |
| High Temperature Operating (Constant) | PASS | PASS |
| Low Temperature Storage | PASS | PASS |
| Low Temperature Operating | PASS | PASS |
| Blowing Dust | PASS | PASS |
| High Altitude Storage | PASS | PASS |
| High Altitude Operation | PASS | PASS |
| High Temperature Storage (cyclic) | PASS | PASS |
| Vibration Minimum Integrity | PASS | PASS |
| Vibration Ground Vehicle | PASS | PASS |
| Function Shock | PASS | PASS |
| Blowing Sand | NO | NO |
| Freeze/Thaw | PASS | PASS |
| Crash Safety Shock | PASS | PASS |
| Bench Handling | PASS | PASS |
| Transit Drop | PASS | PASS |



| | Surface Book 2 | Surface Book 2 | Surface Book 2 |
|---------------------------------------|---------------------|---------------------|-------------------|
| | 13.5" Intel Core i5 | 13.5" Intel Core i7 | 15" Intel Core i7 |
| Model number | 1834 | 1835 | 1813 |
| Test | | | |
| Thermal Shock | NO | NO | NO |
| Humidity | PASS | PASS | PASS |
| Explosive Atmosphere | PASS | PASS | PASS |
| High Temperature Storage (Constant) | PASS | PASS | PASS |
| High Temperature Operating (Constant) | PASS | PASS | PASS |
| Low Temperature Storage | PASS | PASS | PASS |
| Low Temperature Operating | PASS | PASS | PASS |
| Blowing Dust | PASS | PASS | PASS |
| High Altitude Storage | PASS | PASS | PASS |
| High Altitude Operation | PASS | PASS | PASS |
| High Temperature Storage (cyclic) | PASS | PASS | PASS |
| Vibration Minimum Integrity | PASS | PASS | PASS |
| Vibration Ground Vehicle | PASS | PASS | PASS |
| Function Shock | PASS | PASS | PASS |
| Blowing Sand | NO | NO | NO |
| Freeze/Thaw | PASS | PASS | PASS |
| Crash Safety Shock | PASS | PASS | PASS |
| Bench Handling | PASS | PASS | PASS |
| Transit Drop | PASS | PASS | PASS |



| | Surface Go |
|---------------------------------------|------------|
| Model number | 1824 |
| Test | |
| Thermal Shock | NO |
| Humidity | PASS |
| Explosive Atmosphere | PASS |
| High Temperature Storage (Constant) | PASS |
| High Temperature Operating (Constant) | PASS |
| Low Temperature Storage | PASS |
| Low Temperature Operating | PASS |
| Blowing Dust | PASS |
| High Altitude Storage | PASS |
| High Altitude Operation | PASS |
| High Temperature Storage (cyclic) | PASS |
| Vibration Minimum Integrity | PASS |
| Vibration Ground Vehicle | PASS |
| Function Shock | PASS |
| Blowing Sand | NO |
| Freeze/Thaw | PASS |
| Crash Safety Shock | PASS |
| Bench Handling | PASS |
| Transit Drop | PASS |



| | Surface Laptop 3 13" | Surface Laptop 3 |
|-----------------------------|-------------------------|------------------|
| | | 15" |
| Model number | 1867 | 1872 |
| Test | | |
| High Altitude Operating | PASS | PASS |
| High Altitude Storage | PASS | PASS |
| Humidity | PASS | PASS |
| High Temperature Storage | PASS | PASS |
| High Temperature Operating | PASS | PASS |
| Vibration Minimum Integrity | PASS | PASS |
| Vibration Ground Vehicle | PASS | PASS |
| Low Temperature Operating | PASS | PASS |
| Low Temperature Storage | PASS | PASS |
| Shock Operational | PASS | PASS |
| Crash Hazard Operational | PASS | PASS |
| Drop Benchtop | PASS | PASS |
| Drop Transit | PASS | PASS |
| Blowing Dust | PASS | PASS |
| Temperature Shock | PASS | PASS |
| Freeze/Thaw | PASS | PASS |
| Blowing Sand | PASS | PASS |
| Explosive Atmosphere | PASS | PASS |



| | Surface Pro 7 | Surface Pro X |
|---------------------------------------|---------------|---------------|
| Model number | 1866 | 1876 |
| Test | | |
| Thermal Shock | PASS | PASS |
| Humidity | PASS | PASS |
| Explosive Atmosphere | PASS | PASS |
| High Temperature Storage (Constant) | PASS | PASS |
| High Temperature Operating (Constant) | PASS | PASS |
| Low Temperature Storage | PASS | PASS |
| Low Temperature Operating | PASS | PASS |
| Blowing Dust | PASS | PASS |
| High Altitude Storage | PASS | PASS |
| High Altitude Operation | PASS | PASS |
| High Temperature Storage (cyclic) | PASS | PASS |
| Vibration Minimum Integrity | PASS | PASS |
| Vibration Ground Vehicle | PASS | PASS |
| Function Shock | PASS | PASS |
| Blowing Sand | PASS | PASS |
| Freeze/Thaw | PASS | PASS |
| Crash Safety Shock | PASS | PASS |
| Bench Handling | PASS | PASS |
| Transit Drop | PASS | PASS |



| | Surface Go 2 LTE | Surface Go 2 |
|-----------------------------|------------------|--------------|
| Model number | 1927 | 1926 |
| Test | | |
| High Altitude Operating | PASS | PASS |
| High Altitude Storage | PASS | PASS |
| Humidity | PASS | PASS |
| High Temperature Storage | PASS | PASS |
| High Temperature Operating | PASS | PASS |
| Vibration Minimum Integrity | PASS | PASS |
| Vibration Ground Vehicle | PASS | PASS |
| Low Temperature Operating | PASS | PASS |
| Low Temperature Storage | PASS | PASS |
| Shock Operational | PASS | PASS |
| Crash Hazard Operational | PASS | PASS |
| Drop Benchtop | PASS | PASS |
| Drop Transit | PASS | PASS |
| Blowing Dust | PASS | PASS |
| Temperature Shock | PASS | PASS |
| Freeze/Thaw | PASS | PASS |
| Blowing Sand | PASS | NO |
| Explosive Atmosphere | PASS | PASS |



15" Model number 1900 1899 Test Thermal Shock PASS PASS Humidity PASS PASS **Explosive Atmosphere** PASS PASS High Temperature Storage **PASS PASS** (Constant) **High Temperature Operating PASS** PASS (Constant) Low Temperature Storage PASS PASS Low Temperature Operating **PASS** PASS **Blowing Dust** PASS PASS **PASS** PASS High Altitude Storage PASS PASS High Altitude Operation High Temperature Storage **PASS** PASS (cyclic) PASS Vibration Minimum Integrity **PASS** Vibration Ground Vehicle PASS PASS PASS **Function Shock** PASS PASS PASS **Blowing Sand** Freeze/Thaw **PASS** PASS Crash Safety Shock PASS PASS PASS Bench Handling PASS Transit Drop **PASS** PASS

Surface Book 3 13"

Surface Book 3



| | Surface ProX SQ2 | Surface Laptop Go |
|--|------------------|----------------------|
| Model number | 1876 | 1943 |
| Test | | |
| Thermal Shock | PASS | PASS |
| Humidity | PASS | PASS |
| Explosive Atmosphere | PASS | PASS |
| High Temperature Storage (Constant) | PASS | PASS |
| High Temperature Operating (Constant) | PASS | PASS |
| Low Temperature Storage | PASS | PASS |
| Low Temperature Operating | PASS | PASS |
| Blowing Dust | PASS | PASS |
| High Altitude Storage | PASS | PASS |
| High Altitude Operation | PASS | PASS |
| High Temperature Storage (cyclic) | PASS | PASS |
| Vibration Minimum Integrity | PASS | PASS |
| Vibration Ground Vehicle | PASS | PASS |
| Function Shock | PASS | PASS |
| Blowing Sand | PASS | PASS |
| Freeze/Thaw | PASS | PASS |
| Crash Safety Shock | PASS | PASS |
| Bench Handling | PASS | PASS |
| Transit Drop | PASS | PASS |



| | Surface Pro 7+ Wi-Fi | Surface Pro 7 + LTE |
|--|----------------------|------------------------|
| Model number | 1961 | 1960 |
| Test | | |
| Thermal Shock | PASS | PASS |
| Humidity | PASS | PASS |
| Explosive Atmosphere | PASS | PASS |
| High Temperature Storage (Constant) | PASS | PASS |
| High Temperature Operating (Constant) | PASS | PASS |
| Low Temperature Storage | PASS | PASS |
| Low Temperature Operating | PASS | PASS |
| Blowing Dust | PASS | PASS |
| High Altitude Storage | PASS | PASS |
| High Altitude Operation | PASS | PASS |
| High Temperature Storage (cyclic) | PASS | PASS |
| Vibration Minimum Integrity | PASS | PASS |
| Vibration Ground Vehicle | PASS | PASS |
| Function Shock | PASS | PASS |
| Blowing Sand | PASS | PASS |
| Freeze/Thaw | PASS | PASS |
| Crash Safety Shock | PASS | PASS |
| Bench Handling | PASS | PASS |
| Transit Drop | PASS | PASS |



| | Surface Laptop 4 | Surface Laptop 4 |
|--|------------------|------------------|
| Model number | 1951 | 1953 |
| Test | | |
| Thermal Shock | PASS | PASS |
| Humidity | NO | PASS |
| Explosive Atmosphere | PASS | PASS |
| High Temperature Storage (Constant) | PASS | PASS |
| High Temperature Operating (Constant) | PASS | PASS |
| Low Temperature Storage | PASS | PASS |
| Low Temperature Operating | PASS | PASS |
| Blowing Dust | PASS | PASS |
| High Altitude Storage | PASS | PASS |
| High Altitude Operation | PASS | PASS |
| High Temperature Storage (cyclic) | PASS | PASS |
| Vibration Minimum Integrity | PASS | PASS |
| Vibration Ground Vehicle | PASS | PASS |
| Function Shock | PASS | PASS |
| Blowing Sand | PASS | PASS |
| Freeze/Thaw | PASS | PASS |
| Crash Safety Shock | PASS | PASS |
| Bench Handling | PASS | PASS |
| Transit Drop | PASS | PASS |



| | Surface Laptop 4 | Surface Laptop 4 |
|---------------------------------------|------------------|------------------|
| Model number | 1959 | 1979 |
| Test | | |
| Thermal Shock | PASS | PASS |
| Humidity | PASS | PASS |
| Explosive Atmosphere | PASS | PASS |
| High Temperature Storage (Constant) | PASS | PASS |
| High Temperature Operating (Constant) | PASS | PASS |
| Low Temperature Storage | PASS | PASS |
| Low Temperature Operating | PASS | PASS |
| Blowing Dust | PASS | PASS |
| High Altitude Storage | PASS | PASS |
| High Altitude Operation | PASS | PASS |
| High Temperature Storage (cyclic) | PASS | PASS |
| Vibration Minimum Integrity | PASS | PASS |
| Vibration Ground Vehicle | PASS | PASS |
| Function Shock | PASS | PASS |
| Blowing Sand | PASS | PASS |
| Freeze/Thaw | PASS | PASS |
| Crash Safety Shock | PASS | PASS |
| Bench Handling | PASS | PASS |
| Transit Drop | PASS | PASS |