

MIL-STD-810G

ENVIRONMENTAL ENGINEERING CONSIDERATIONS AND LABORATORY TESTS

Getac computers have been independently certified to comply with MIL-STD-810G.

	MIL-STD-810G	B300 Notebook	V100 Convertible	M230 Notebook	A790 Notebook	E100 Tablet	PS535F GPS PDA
IP65		✓	✓				✓
IP54				✓	✓	✓	
Low Pressure (Altitude): Storage/Air Transport (40,000 ft [18.8kPa] with altitude change rate 2,000 ft/min)	500.5 Procedure I	✓	✓	✓	✓	✓	
Low Pressure (Altitude): Operation / Air Carriage (15,000 ft [57.2kPa] with altitude change rate 2,000 ft/min)	500.5 Procedure II	✓	✓	✓	✓	✓	
High Temperature: Storage 33°C ~ 71°C	501.5 Procedure I	✓	✓	✓	✓	✓	✓
High Temperature: Operation 60°C	501.5 Procedure II	✓	✓	✓	✓	✓	✓
High Temperature: Tactical High Storage to High Operation	501.5 Procedure III	✓	✓				
Low Temperature: Storage	502.5 Procedure I	-51°C	-51°C	-40°C	-40°C	-40°C	-30°C
Low Temperature: Operation -20°C	502.5 Procedure II	✓	✓	✓	✓	✓	✓
Temperature shock: Storage 3 cycles	503.5 Procedure I-C	80°C ~ -51°C	71°C ~ -51°C	71°C ~ -40°C	71°C ~ -40°C	60°C ~ -20°C	71°C ~ -30°C
Rain-Drip: 15 min exposure (280L/m2/hr)	506.5 Procedure III	✓	✓	✓	✓	✓	✓
Sand and Dust: Blowing dust Silica flour with 6 hours settling dust	510.5 Procedure I	✓	✓	✓	✓	✓	✓
Sand and Dust: Blowing sand – operating temperature 60°C	510.5 Procedure II	✓	✓				
Vibration: General Vibration Figure 514.6 E-1 (storage)	514.6 Procedure I Category 24	✓	✓	✓	✓	✓	✓
Vibration: General Vibration Figure 514.6 C1 (operating)	514.6 Procedure I Category 4	✓	✓	✓	✓	✓	✓
Shock: Functional Shock 20g, 11ms, Sawtooth Waveform	516.6 Procedure I					Operating	Operating
Shock: Functional Shock 40g, 11ms, Sawtooth Waveform	516.6 Procedure I	Operating	Operating	Operating	Operating		Non-Operating
Shock: Functional Shock 75g, 11ms, Sawtooth Waveform	516.6 Procedure I					Non-Operating	
Shock: Transit Drop 26 drops from 36 in height, free drop onto 2in plywood	516.6 Procedure IV	✓	✓	✓	✓	✓	
Shock: Transit Drop Total 78 continuous drops from 48~72in height	516.6 Procedure IV	✓	✓				
Shock: Transit Drop 26 drops from 60in height, free drop onto steel plate for operation	516.6 Procedure IV						✓
Humidity: Aggravated 30°C ~ 60°C cycled with RH 95%	507.5 Procedure II	✓	✓	✓			✓
Freeze / Thaw Rapid temperature change for 3 cycles.	524 Procedure III	✓	✓				✓

MIL-STD-461F

REQUIREMENTS FOR THE CONTROL OF ELECTROMAGNETIC INTERFERENCE CHARACTERISTICS OF SUBSYSTEMS AND EQUIPMENT

Getac computers have been independently certified to comply with MIL-STD-461F.

Models with 461F as an option:

- Getac B300 Rugged Notebook
- Getac V100 Rugged Convertible
- Getac M230 Rugged Notebook
- Getac A790 Rugged Notebook

Radiated Emissions:

RE101, *radiated emissions, magnetic field, 30 Hz to 100 kHz.*

This requirement is specialized and is intended primarily to control magnetic fields for applications where equipment is present in the installation which is potentially sensitive to magnetic induction at lower frequencies.

RE102, *radiated emissions, electric field, 10 kHz to 18 GHz.*

The requirements are applicable to electric field emissions from the Equipment Under Test (EUT) and associated cables.

Radiated Susceptibility:

RS101, *radiated susceptibility, magnetic fields, 30 Hz to 100 kHz.*

This requirement is specialized and intended primarily to ensure that performance of equipment potentially susceptible to low frequency magnetic fields is not degraded.

RS103, *radiated susceptibility, electric field, 10 kHz to 40 GHz.*

The requirements are applicable to both the EUT enclosures and EUT associated cabling.

Conducted Emissions:

CE101, *conducted emissions, power leads, 30 Hz to 10 kHz.*

The requirements are applicable to leads that obtain power from sources that are not part of the EUT.

CE102, *conducted emissions, power leads, 10 kHz to 10 MHz.*

The requirements are applicable to leads that obtain power from sources that are not part of the EUT.

Conducted Susceptibility:

CS101, *conducted susceptibility, power leads, 30 Hz to 150 kHz.*

The requirement is applicable to power input leads that obtain power from other sources that are not part of the EUT.

CS114, *conducted susceptibility, bulk cable injection, 10 kHz to 400 MHz.*

The requirements are applicable to all electrical cables interfacing with the EUT enclosures.

CS115, *conducted susceptibility, bulk cable injection, impulse excitation.*

The requirements are applicable to all electrical cables interfacing with EUT enclosures.

CS116, *conducted susceptibility, damped sinusoid transients, cables and power leads, 10 kHz to 100 MHz.*

The requirements are applicable to all electrical cables interfacing with each EUT enclosure and also individually on each power lead.