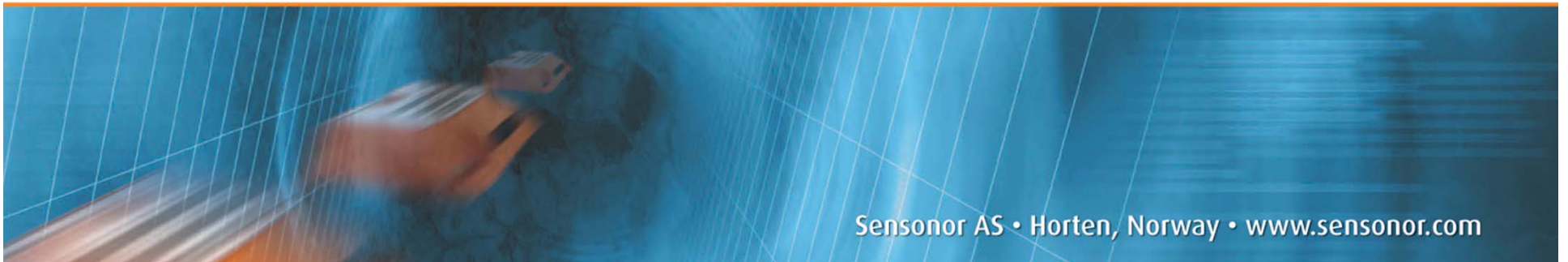


STIM300 Product Qualification



Qualification program

Environmental Tests

Operating Temperature

Non Operating Temperature

Powered Temperature Cycling

Non Powered Temperature Cycling

Mechanical Tests

Vibration

Mechanical Shock

EMC/ESD

Emission

Immunity

Susceptibility

HBM/Air Discharge

Other

Ingress Protection Classification

Environmental Tests

- High Temperature Operating Life (HTOL): Ref: MIL-STD-810G / 501.4-2
 - Temperature: +85°C
 - Duration: 1000hrs
 - Supply voltage: 5V0

- Low Temperature Operating Life (LTOL): Ref: MIL-STD-810G / 501.4-2
 - Temperature: -40°C
 - Duration: 1000hrs
 - Supply voltage: 5V0

- High Temperature Storage Life (HTSL): Ref: MIL-STD-810G / 501.4-1
 - Temperature: +90°C
 - Duration: 1000hrs

- Low Temperature Storage Life (LTSL): Ref: MIL-STD-810G / 501.4-1
 - Temperature: -55°C
 - Duration: 1000hrs

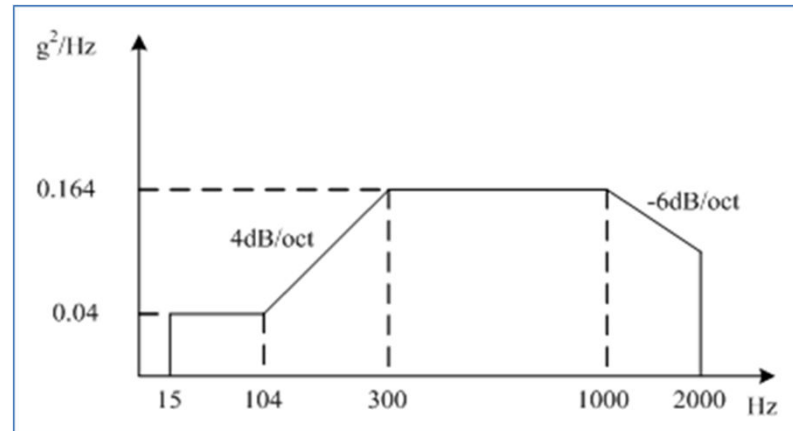
Environmental Tests

- ❑ Temperature Cycling: Ref. MIL-STD-810G
 - ❑ Temperature: [-40°C/+85°C]
 - ❑ Dwell time: 15min
 - ❑ Number of cycles: 250

- ❑ Power Temperature Cycling: Ref. MIL-STD-810G
 - ❑ Temperature: [-40°C/+85°C]
 - ❑ Dwell time: 15min
 - ❑ Number of cycles: 250
 - ❑ Supply voltage: 5V0

Mechanical Tests

- ❑ Random Vibration: Ref. MIL STD 810E 514.4-8 "High Performance Aircraft"
 - ❑ 15-2000Hz
 - ❑ Grms: 14.85



- ❑ Mechanical Shock: Ref. MIL STD 883G method 2002.4
 - ❑ 1500g
 - ❑ Pulse=0.5ms (half sine)
 - ❑ 5 shocks in each direction

- Immunity to electrostatic discharges

Reference: [EN/\(IEC\) 61000-4-2:2009](#)

- Immunity to radio frequency electromagnetic fields

Reference: [EN/\(IEC\) 61000-4-3:2006+A1](#)

- Immunity to fast transients

Reference: [EN/\(IEC\) 61000-4-4:2012](#)

- Immunity to surge transients

Reference: [EN/\(IEC\) 61000-4-5:2007](#)

- Immunity to conducted radio frequency disturbances

Reference: [EN/\(IEC\) 61000-4-6:2009](#)

- Measurement of radio frequency electromagnetic field

Reference: [CISPR 16-2-3:2006](#)

- Compass safe distance

Reference: [EN/\(IEC\) 60945:2002](#)

- Immunity to electrostatic discharges

Reference: [RTCA DO160E Section 25](#)

- Conducted Emissions-Power leads

Reference: [MIL-STD-461F CS114](#)

- Conducted susceptibility-bulk cable injection-impulse excitation

Reference: [MIL-STD-461F CS116](#)

- Radiated Emission-electric field

Reference: [MIL-STD-461F RE102](#)

- Radiated susceptibility-electric field

Reference: [MIL-STD-461F RS103](#)

ESD

- Air Discharge 15kV

[Ref. RTCA-DO-160](#)

- Human Body Model 2kV

[Ref. JEDEC/ESDA JS-001](#)

Ingress Protection Classification

□ Ingress Protection Classification

□ Ref. IEC60529

□ Approved for IP67

| Element | Numerals or letters | Meaning for the protection of <i>equipment</i> | Meaning for the protection of <i>persons</i> |
|-------------------------------|---|---|---|
| Code letters | IP | – | – |
| First characteristic numeral | 0 1 2 3 4 5 6 | Against ingress of solid foreign objects (non-protected) ≥ 50 mm diameter ≥ 12,5 mm diameter ≥ 2,5 mm diameter ≥ 1,0 mm diameter dust-protected dust-tight | Against access to hazardous parts with (non-protected) back of hand finger tool wire wire wire |
| Second characteristic numeral | 0 1 2 3 4 5 6 7 8 | Against ingress of water with harmful effects (non-protected) vertically dripping dripping (15° tilted) spraying splashing jetting powerful jetting temporary immersion continuous immersion | – |