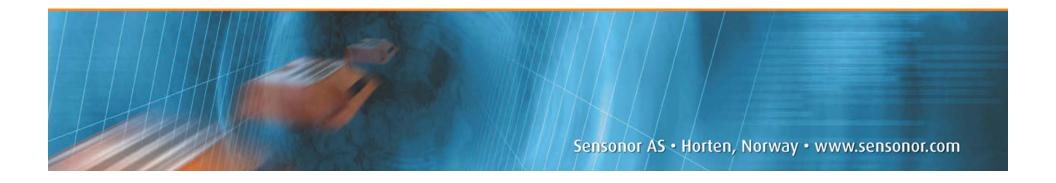


### STIM300 Product Qualification



## 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**

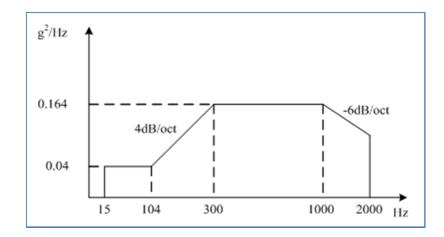


- ☐ Temperature Cycling: Ref. MIL-STD-810G
  - ☐ Temperature: [-40°C/+85°C]
  - ☐ Dwell time: 15min
  - Number of cycles: 250
- Power Temperature Cycling: Ref. MIL-STD-810G
  - ☐ Temperature: [-40°C/+85°C]
  - ☐ Dwell time: 15min
  - Number of cycles: 250
  - ☐ Supply voltage: 5V0

### **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

## **EMC**



☐ 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			

## **EMC**



☐ 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

