

## Typical Environmental and Performance Specifications

The following represents typical performance values verified through testing in a NAMAS approved environmental test facility over a range of product types. Where values outside these limits are required or specific product verification is needed, please call to discuss your requirements.

### Environmental

#### Temperature

Operational general	0	to	+55°C
Operating specific	-45	to	+70°C (certain product types)
Cyclic	+10	to	+50°C (10 cycles over 30 minutes)
Storage general	-10	to	+70°C
Storage Specific	-55	to	+85°C (non product types)

Humidity +50°C @ 95% RH (non condensing)

Shock (bump) 4000 shocks @ 20g/11m/seconds  
Half sine profile, 2 to 3 shocks/seconds  
Tests conducted in all three axis

Vibration 5 to 13 Hz, 5.9mm peak to peak  
13 to 50 Hz, +/-2g

Altitude 187mb +/-9mb (40000 ft) @ 20°C +/-2°C

Sealing Up to IP68 depending on type

MTBF In excess of 80000 hours (Mean Time Between Failure)

### Misc

Compliance testing to most military and industrial specifications available:

BS2011 Pt.2.1

Def Stan 07-55 Pt.2

DO-160D

MIL Specs

NAMAS Environmental Test house facility

ISO 9001 : 2000

Standard Non Disclosure Agreement to cover development

EMC Pro compliance in-house testing