North Atlantic Industries

Excellence in ALL we do

Environmental Specifications

The following table outlines the Environmental Specifications for card level products of North Atlantic Industries. All of our VME and cPCI cards are designed to be available for either air or conduction cooling (see part number). All other cards are designed for air cooling only. All of our cards also incorporate appropriate stiffening to meet the shock and vibration requirements specified. Stiffening is required to keep the flexing (or bowing) of the card within the limits that the ICs can withstand.

	Commercial	MIL (air cooled)	MIL (conduction cooled) using wedge-locks
Temperature:			
Operating:	0°C to +70°C	-40°C to +85°C, ambient	-40°C to +85°C, at thermal interface
Storage:	-40°C to +85°C	-55°C to +105°C, ambient	-55°C to +105°C
Humidity:			
Operating:	0 to 95%, non-condensing	0 to 95%, non-condensing	0 to 95%, non-condensing
Storage:	0 to 95%, non-condensing	0 to 100%, non-condensing	0 to 100%, non-condensing
Vibration:			
Sine: (1)	2 g peak, 15- 2kHz (2)	10 g peak, 15- 2kHz (2)	10 g peak, 15- 2kHz (3)
Random: (4)	$0.04g^2$/Hz, 15- 2kHz	$0.04g^2$/Hz, 15- 2kHz	$0.1g^2$/Hz, 15- 2kHz
Shock: (5)	30 g peak, half sine, 11 ms	30 g peak, half sine, 11 ms	40 g peak, half sine, 11 ms
Altitude: (6)	To 60,000 ft	To 60,000 ft	To 60,000 ft

(1) Based on a sweep duration of ten minutes per axis, each of the three mutually perpendicular axes.
(2) Displacement limited to 0.10 D.A. from 15 to 44 Hz
(3) Displacement limited to 0.436 D.A. from 15 to 21 Hz
(4) 60 minutes per axis each of three mutually perpendicular axes
(5) Three hits per direction per axis (total of 18 hits)
(6) For altitudes higher than 60,000 ft contact Customer Service

This document is furnished for the customers of North Atlantic Industries. Cards are designed to meet but have not been individually tested to the above specifications. All prior testing has been done as part of a total system test. The information in this document is subject to change without notice and should not be construed as a commitment by North Atlantic Industries. While reasonable precautions have been taken, we assume no responsibility for any errors that may appear in this document. No license or rights are granted by implication or otherwise in connection therewith.