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AIRCRAFT IONIZATION UNIT SPECIFICATION SHEET
Part # (ACA-RN-0001)



Mechanical Specifications

Dimensions: 7.02" L x 3.27" W x 5.36" H (w/Probes Extended)
Enclosure: Black Anodized Aluminum (Sealed)
Electrode Material: Carbon Fiber
Weight: 1.34 pounds (607 grams)
Temperature Range: -65 degrees C (-85 degrees F) to +85 degrees C (+185 degrees F)
Humidity Range: 0-99% Relative Humidity

Electrical Specifications

Voltage: 28 VDC (Range 18-32 VDC)
Current: 150 mA
Power: 4.2 Watts
Frequency: N/A
Air Flow Sensing: Electronic – no external air pressure or flow switch required.
Connection Type: MIL-C-26482, Series 2 Connector / 8 pin / Model MS-3470-L12-8-P
Connection Details: A = 28 VDC, B = DC Common, C = Chassis Ground, D = Dry Contact Status Contact, E = Dry Contact Status Contact (F,G, & H not used)
Monitoring: Continuity between pins D & E when unit is powered and no alarms present. When alarm occurs/unit is not powered, pins D & E will be open.

RTCA/DO-160 and DEF STAN Qualifications:

ACA-RN-0001 Component meets or exceeds the following by test or analysis:

Temperature	Section 4 Cat B4 (-65degrees C [-85 F] to +85 degrees C [+185 F])
Altitude and Air Transportability	Section 4 Cat B4 / 55,000 feet
Humidity	Section 6 Cat C
Operational Acceleration	DEF STAN 00-35 Part 3 Issue 4 Test M-13
Operational Shock	Section 7 Cat A & B & E
Crash Safety Acceleration	DEF STAN 00-35 Part 3 Chapter 2-13 Test M-13
Crash Safety Impulse/Sustained	Section 7 Cat B
Vibration Operating	Section 8 Cat R Curve C & G
Explosive Atmosphere	Section 9 Cat E
Waterproofness	Section 10 Cat W
Fluids Susceptibility	Section 11 Cat F
Sand and Dust	Section 12 Cat D
Fungus	Section 13 Cat F
Corrosion and Erosion	DEF STAN 00-970 Vol 2 Chapter 407
Salt Fog	Section 14 Cat S
Magnetic Effect	Section 15 Cat B & Z
Power Import	Section 16 Cat Z
Voltage Spike	Section 17 Cat A & B
Audio-Frequency Susceptibility	Section 18 Cat Z
Induced Signal Susceptibility	Section 19 Cat ZC
HIRF, Radio Frequency	Section 20 Cat S & T
Emission of Radio Frequency	Section 21 Cat M & P
Lightning Induced Transient Susceptibility	Section 22
Lightning, Direct Effect	Section 23 Cat X
Icing	Section 24 Cat C
In-flight Loss of Cooling	N/A / No Cooling Required
Electrostatic Discharge	Section 25 Cat A
Emitted Spike	Section 26 Cat A
Fire and Flammability	DEF-STAN 59-411 Part 3 Issue 1 Section 9.4
Solar Radiation	DEF STAN 00-35 Part 3 Chapter 3-03
Humidity Temperature and Pressure	DEF STAN 00-35 Part 3 Chapter 1-03
Tropical Exposure	DEF STAN 00-35 Part 3 Chapter 1-06
Hail	DEF STAN 00-35 Part 3 Chapter 1-19
Endurance	N/A - No moving parts to wear out or
Noise	break No audible noise emitted

Two (2) year exclusive component warranty.

Mean Time Between Failure (MTBF) - 87,570 Hours (Calculated)

Federal Aviation Administration - Parts Manufacturer Approval (PMA)

U.S. Patent D868,233 - Design - Issued November 26, 2019,

U.S. Patent US10,786,818 B2 - Utility - Issued September 29, 2020

Title: AIRCRAFT PROACTIVE AIR AND SURFACE PURIFICATION COMPONENT

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