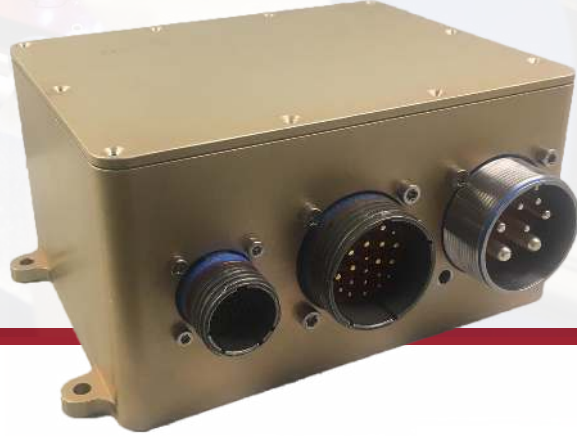


# ASD101-0000-02 CONTROLLER



ASD101-0000-02 is a controller unit which controls two GSE101-0000-06 units simultaneously.

Filter and controller card is designed to meet DO160 (Environmental Conditions) and DO254 (Hardware Specifications). The product is compliant to civil aviation standards. It can be customized for various types of servo actuators.

## STANDARDS

MIL-STD-461F  
MIL-STD-810G  
DO-160G  
DO-254

## APPLICATIONS



Fixed-Wing Aircraft - Flight Control Systems

## KEY FEATURES

- > High accuracy control
- > Integrated to mechanical flight controls
- > High performance output

Environmental Specification		
Temperature / Altitude		-40°C to 70°C Altitude: 35000 ft
Temperature Variation		Temperature Change Rate: -5°C/min
Humidity		10 Cycle Humidity Exposure. (1 cycle consist of; 2h 85%rH, 6h 95% rH and 16h 85% to 95% rH change.
Operational Shock		6g, 11ms Saw Tooth shock profile, 3 axis
Vibration		RTCA-DO160E Figure 8-3 Curve M (Sinusoidal standard vibration)
Explosion Proofness		Non Ignition Test
Water Proofness		Condensing Water Proof Test
Sand and Dust		Sand and Dust, 3 axis
Fungus Resistance		Fungus Growth (30°C 97%rH 28day)
Salt Spray	RTCA-DO160E	24h exposure, 24h drying, 24h exposure, 24h drying
Icing		3 Cycle Chamber Transfer, Chamber 1 = -40°C, Chamber 2 = 30°C and 95%rH
Magnetic Effect		19cm Compass Needle Effecting Distance
Power Input		20.5VDC to 32.2VDC
Voltage Spike		600V Peak, 2µs Rise Time, 10µs Fall Time
Induced Signal Susceptibility		Magnetic Fields induced into the equipment: 20 A rms at 400 Hz Magnetic fields induced into interconnecting cables: IxL=30A-m at 400 Hz reducing to 0.8 A-m at 15 kHz Electric Fields induced into interconnecting cables: VxL=1800 Vm from 380 to 420 Hz Spikes induced into interconnecting cables: Figure 19-4 L=3.0 m
Lightning Induced Transient Susceptibility		While equipment is operating single stroke, multiple strokes, multiple burst and pin injection tests are executed. (A3J33)
Audio Frequency Susceptibility (CS101)		30Hz to 150kHz
Emission of Radio Frequency Energy (CE102 and RE102)	MIL-STD-461F	CE102 = 10kHz to 10MHz RE102 = 2MHz to 18GHz
RF Susceptibility (Conducted and Radiated) (CS114 and RS103)		CS114 = 10kHz to 200MHz RS103 = 2MHz to 18GHz
Electrostatic Discharge (ESD) Susceptibility (CS118)	MIL-STD-461G	15kV air discharge.
Steady State Acceleration	MIL-STD-810G	Structural Test Level: Forward: 4 g, Aft: 4 g, Up: 10.5 g, Down: 5.5 g, Lateral (+/-)3.45 g Operational Test Level: Forward: 3 g, Aft: 3 g, Up: 7 g, Down: 3.5 g, Lateral (+/-)3 g

Two Channel Controller Specifications		Weight	2±0.2 kg
Operating Voltage	28 VDC	No Load Static Current At 28 VDC	0.10 TO 0.20 A
Continuous Current	30 A	3KN Load Static Current at 28 VDC	2 TO 4 A
Operating Temperature Range	-40 TO +70 °C	Aileron Sensor Misalignment Compensation Range	±3.5 DEGREE
Operating Altitude Upto	+35.000 ft		
Dimensions	175x130x80 mm		