

Aircraft Cabin Digital Audio DC Amplifier with High-Level Input Universal Interface

DA-250DC



The Alto DA-250DC is a TSO-C139 certified 8 X 40W / channel, Class D audio amplifier with integrated Digital Signal Processing (DSP) and High-Level Input Interface board with PA bypass and Aux input. The core design includes an 8 channel, 320 Watt RMS audio amplifier with an advanced audio processor. An isolated Interface card integrated into the unit allows the unit to be powered by Cabin Management System power amplifier outputs. The interface card will accept full range or split midrange/subwoofer audio outputs. The DA-250DC interfaces with typical cockpit audio systems as an Entertainment Amplifier. A selectable auxiliary input may be used to interface with volume controlled, personal media devices independent of the existing IFE system.

FEATURES

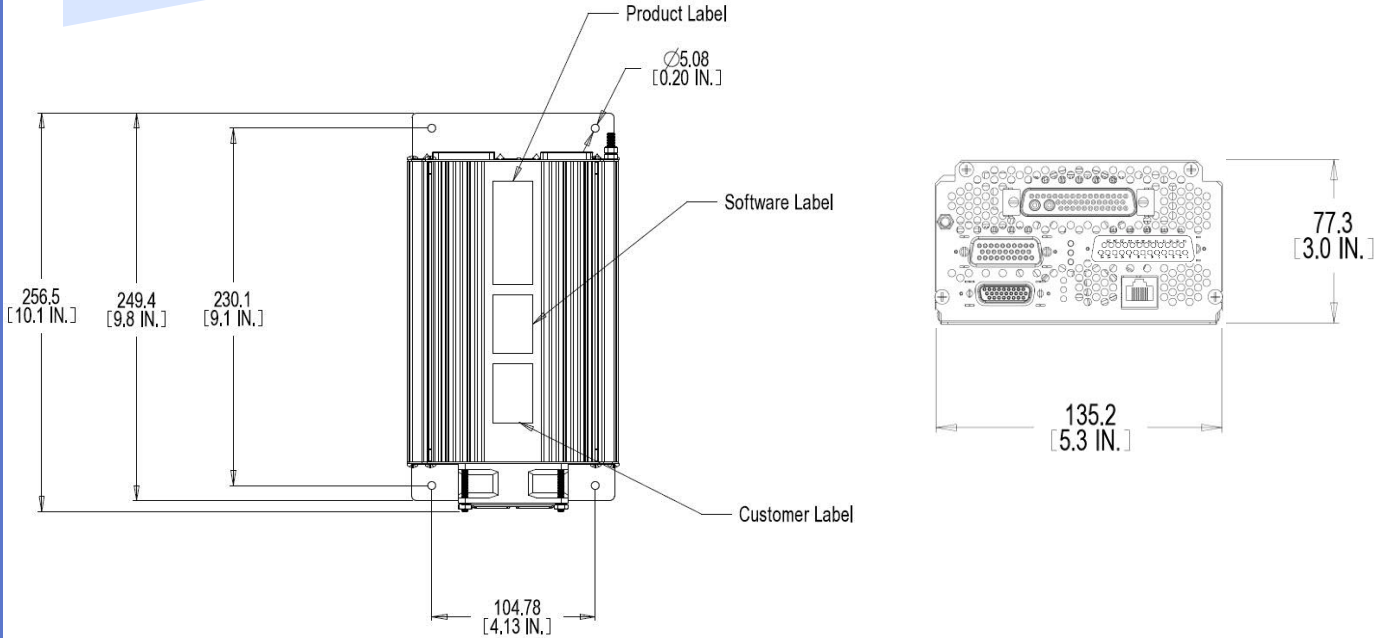
- Unit certified to TSO-C139
- 8 channels, 40 Watts RMS per channel Class D for very high efficiency with low heat output
- Integral EQ customized for each aircraft interior
- Advanced DSP including dynamic bass management, signal compression, spatial enhancement, Sinewatch™ distortion elimination
- Allows PA over entertainment speakers via direct pass through, power loss or manual trigger.
- Integrated universal interface card that accepts directly coupled speaker level audio from full range or midrange/subwoofer outputs
- Volume controlled auxiliary input independent of legacy IFE system via ground logic select
- Preserves existing IFE configuration for ease of integration
- One unit supports one audio zone
- Operates on 28 VDC power supply
- Weight under 4 Lbs.
- Small enclosure with forced air cooling for flexible mounting

SPECIFICATIONS

- Product Code 106500-0250
- Frequency Response 20Hz - 20KHz custom contoured to specific aircraft cabin
- Power Supply 28VDC
- Operating Current 3 A nominal
15 A maximum
- Idle Current (no signal) 800 mA
- Audio Input 2 Channel Speaker Level with separate hi-pass and low-pass inputs
Line level stereo input for personal audio device (no pre-amp required)
- Output Power 40 Watts RMS/channel (320W) total
- Output Load 4 - 8 Ohm recommended, 3 ohm minimum
Average impedance of all 8 channels must be >3.5 ohms
- Distortion <0.1% THD @ 50% rated power, maximum 3% (distortion limiter active)
- Equalizers Custom designed EQ/crossovers matched to aircraft cabin utilizing loudspeakers from the Alto Aviation Entertainment System (AES) catalog
- Dimensions 5.4"W x 3.7"H x 10.1"D (138mmW x 94mmH x 257mmD)
- Weight <3.8 lbs / 1.72 kg
- DO-160F Env. Cat [A2X]CAB[(SC)(HR)]EXXXXFZA(CF)[XXXI]AR(CF)ACTTM[XXE3X][XXXX]XAX

DA-250DC

DIMENSIONS



CONNECTORS

J1 MAIN Connector

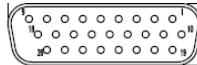
43W2 Combo D Male
 Mating connector



Positronic # CBD43W2M55B100V5X
 Positronic # CBC43W2S110ANVL0/AA

J2 AUX Connector

26 pin D-sub Female
 Mating connector



Positronic # ODD26F4B100V5X
 Positronic # DD26M10ANVL0/AA

Interface Connector J4

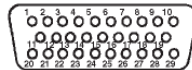
25 pin Male Hi-Density D-Sub
 Mating connector



Positronic # MD25M5B10T2X
 Positronic # RD25S10JVLX

Interface Connector J5

29 pin Male Std-Density D-Sub
 Mating connector



Positronic # MD29M5B100V5X
 Positronic # RD29S10ANVL0/AA-1738.0