

# CABINACe-2™

A WIRELESS ACCESS POINT FROM THE SUMMIT™ LINE

The Telefonix PDT™ CabinACe-2™ Wireless Access Point (WAP) is the first commercially available ARINC 628 compliant 802.11ac, Wave 2 product for commercial aircraft wireless environments. The CabinACe-2 WAP enables the highest capacity performance and efficiency in extremely high-density environments for enhanced connectivity and passenger experience.

The new CabinACe-2 WAP features a small footprint and low power consumption making it suitable for both linefit and retrofit installations. With a concurrent data rate of 1.73 Gbps in 5 GHz and 800 Mbps in the 2.4 GHz range (aggregated data rate of 2.5 Gbps), the CabinACe-2 product delivers best-in-class next generation performance for your airline passengers.

The CabinACe-2 design leverages the latest state-of-the-art, commercial enterprise-class access point from Aruba Networks, Inc. The product utilizes Adaptive Radio Management (ARM) technology that will automatically assign channel and power settings, provide airtime fairness, and ensure that the AP remains clear of all sources of RF interference. Combined with active beam forming, this creates the best possible RF path, and optimizes throughput to deliver the most reliable, and efficient performance to client devices.

The CabinACe-2 WAP meets the electrical and mechanical requirements of ARINC 628P1-7. This market leading product solution is ready for integration into your existing IFEC Systems or to use as a starting point for creating your new system.

## THE SUMMIT LINE

The Telefonix PDT Summit line of aircraft Inflight Entertainment and Connectivity (IFEC) equipment is comprised of state-of-the-art system components that offer you the premier solution set available on the market today. Summit hardware elements can easily be added to enhance your current system or can be combined to create a unique solution to meet your IFEC needs.



## PRODUCT FEATURES

<b>Wireless Protocol</b>	802.11ac (Wave 2) Backwards Compatible to 802.11 a/b/g/n
<b>Radio Operation</b>	
<b>Bands of Operation</b>	Simultaneous 5 GHz and 2.4 GHz
<b>Spatial Streams</b>	4
<b>MIMO</b>	4 x 4
<b>Max Throughput</b>	4 Spatial Streams; SU-MIMO for up to 1.73 Gbps to a Single Client Device 2 Spatial Streams; MU-MIMO for up to 1.3 Gbps for up to Three MU-MIMO Capable Client Devices Simultaneously (5 GHz Band), 600 Mbps (2.4 GHz Band)
<b>Capacity</b>	Support for up to 255 Associated Client Devices per Radio and up to 16 BSSIDs per Radio
<b>Antennas</b>	8 Integrated Omni-Directional Antennas with Adaptive Beam Forming for Enhanced Throughput Capabilities
<b>Adaptive Radio Management</b>	Dynamic Frequency Selection, Able to Adjust Power and Channel in High Density Environments and Adjust Transmit Power to Optimize Available Bandwidth
<b>Regulatory Domain</b>	Support for World Wide (-WW) Operation via CLI, which can Automatically Configure the WAP in Accordance with Location Information to Pre-Set Regulatory Domains Stored within the AP
<b>Regulatory Compliance</b>	United States; FCC 15.247 (2.4 GHz), 15.407 (5GHz), 15.209, 15.207 Canada RSS Gen, RSS-247 Europe; EN 300 328 v2.1.1, EN 301 893 v2.0.7 (DRAFT), EN 301 489-1/-17 v2.1.1/v3.1.1 (DRAFT/DRAFT)
<b>Virtual Controller</b>	Fully Autonomous - No Need for Separate Wireless Controller
<b>I/O Connectors</b> <small>(per ARINC 628)</small>	J1, J2 and J3 are EN4165 Style Connectors. Pinouts Are Compliant to ARINC 628P1-7. Micro USB Connector Is Used for Serial Console Connection to Access Point
<b>Ethernet Bypass</b>	Internal Ethernet Switch to Support Ethernet Pass-Thru (Daisy Chain Operation). Redundant Power Supply to Allow Downstream WAPs to Communicate with Headend Server in the Event of a Failure of the Primary Power Supply
<b>Static IP Address</b>	4 IP Address Strapping Bits (Per ARINC 628P1-7)
<b>Discrete I/O</b>	Input for Remote ON/OFF and RF Enable Control Outputs for Pass-Thru Signaling for Downstream WAPs
<b>Power</b>	115VAC, 360-800Hz. Aircraft-Grade AC Power Supply with 200 msec of Hold-Up Capacity
<b>Mounting</b>	ARINC 836, Size A836-1-7
<b>Cooling</b>	Natural Convection

L x W x H: 7.85" x 9" x 2.5"  
Weight: 3.6 lbs (1.64 Kg)



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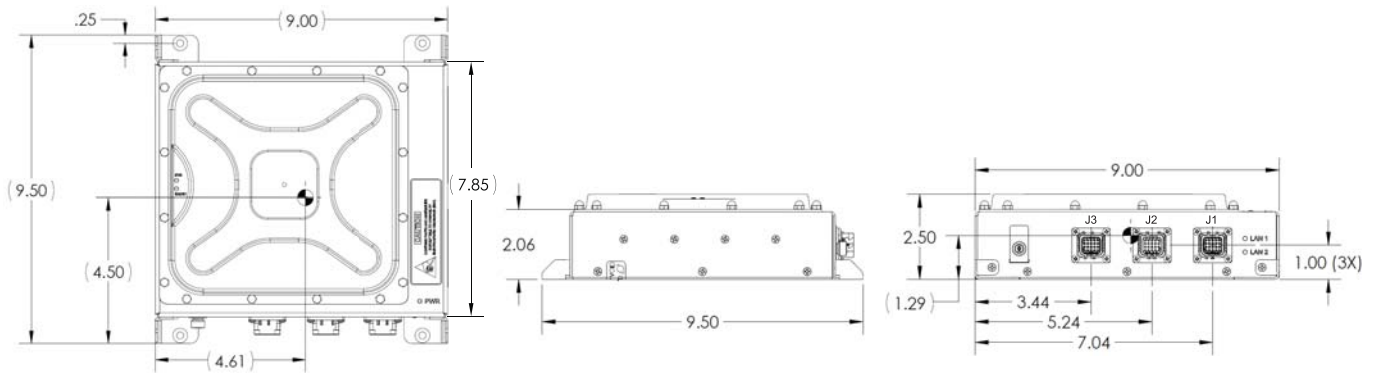
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telefonixpdt.com



# OUTLINE DIMENSIONS

In Inches



## CONNECTORS

REF DESIGNATOR	SHELL	INSERT	MATING SHELL	MATING INSERT
J1	EN4165M01AA	EN4165A20-22-1NA	EN4165M61AA	EN4165A20-22-1NB
J2	EN4165M01AB	EN4165A20-22-1NB	EN4165M61AB	EN4165A20-22-1NA
J3	EN4165M01AC	EN4165A20-22-1NA	EN4165M61AC	EN4165A20-22-1NB

## ENVIRONMENTAL/EMI TEST REQUIREMENTS

DESCRIPTION	SECTION	RTCA/DO-160G CATEGORY
Temperature	Section 4	Category A1
Altitude	Section 4	Category A1
Decompression (45,000 FT)	Section 4	Category A1
Overpressure (-19,000 FT)	Section 4	Category A1
Temperature Variation (5°/min)	Section 5	Category B
Humidity	Section 6	Category A
Waterproofness (140 l/m <sup>2</sup> /Hr)	Section 10	Category W
Fluids Susceptibility (60/40 PGW)	Section 11	11.4.1
Vibration - Random	Section 8	Category S, Curve C
Operational Shock	Section 7	Category B
Crash Safety - Impulse and Sustained	Section 7	Category B
Fungus Resistance	Section 13	Category F
Power Input	Section 16	Category A(WF)X
Voltage Spikes	Section 17	Category A
AF Conducted Susceptibility - Power Inputs	Section 18	Category R(WF)
Induced Signal Susceptibility	Section 19	Category ZW
RF Susceptibility (Conducted and Radiated)	Section 20	Category T
RF Emissions (Conducted and Radiated)	Section 21	Category M
Lightening Induced Transient Susceptibility	Section 22	Per Boeing D6-85512
Electrostatic Discharge	Section 25	Category A

Equipment specifications are updated from time to time to ensure that Telefonix PDT product designs are in line with ongoing market and technology advancements. Please contact us for the most up to date product details.



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