Cab-n-Connect™ A100

Cab-n-Connect™ A100 802.11ac WIRELESS ACCESS POINT

- backwards compatible to 802.11 a/b/g/n standards
- dual WiFi radios - 2.4GHz & 5GHz both supporting 3 spatial streams and 256 QAM modulation for best in class video streaming
- can operate as a Cabin Wireless LAN Unit (CWLU) and Terminal Wireless LAN Unit (TWLU)
- internal antenna with strapping option for remote antenna
- qualified to DO-160G (pending)

POSSIBILITIES START HERE kontron

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802.11ac WIRELESS ACCESS POINT

Provides Best-in-Class performance for next-generation HD video streaming for dense multiple client applications on aircraft. The latest 802.11ac technology builds on 802.11n, delivering up to four times the bandwidth through new technology advancements such as 3X3 Multiple-Input Multiple-Output (MIMO) which allows 3-spatial streams of data to be sent simultaneously to a single client device, substantially improving bandwidth efficiency and utilization. Enhancements in beamforming creates the most efficient path for data transmission between an access point and a client device. Now both the client device and access point work together to provide an optimized communication path for stronger and faster data transmission. This improves throughput performance and results in battery power savings on the client device. The onboard WiNG software provides support needed for fast roaming between access points on the aircraft while eliminating sticky clients. SMART-RF intelligently adapts to the aircraft environment to provide the best client performance by automatically adjusting power and channel as needed. Smart load balancing distributes clients evenly across the access points and bands on the aircraft which improve the overall network performance. Advanced features such as daisy-chain interconnect with fail over and IP address strapping are also supported.

TECHNICAL INFORMATION

RADIO OPERATION	802.11ac CAPABILITIES	– Dual band radios that supports 256-QAM – 3X3 MIMO with 3 Spatial Streams – 802.11ac transmit beamforming – 20, 40 and 80 MHz Channels – 1.9 Gbps data rates on dual concurrent radio operations – Packet Aggregation (AMSDU, AMPDU)
	DATA RATES SUPPORTED	– 802.11b/g: 1,2,5.5,11,6,9,12,18,24,36,48 and 54 Mbps – 802.11a: 6,9,12,18,24,36,48, and 54 Mbps – 802.11n: MCS C-23 up to 450 Mbps; Turbo mode (256 QAM) on 2.4 GHz band up to 600 Mbps – 802.11ac: MCS 0-9 up to 1.3 Gbps
	WIRELESS MEDIUM	– Direct Sequence Spred Spectrum (DSSS), Orthogonal Frequency Division Multiplexing (OFDM) and Spatial Multiplexing (MIMO)
	SECURITY	– Stateful Firewall, IP filtering, NAT, 802.1x, 802.11i, WPA2, WPA Triple Methodology Rogue Detection: 24x7 dual-band WIPS sensing, on-board IDS and secure guest access (hotspot) with captive portal, IPSec and RADIUS Server
	NETWORK STANDARDS	– IEEE 802.11a/b/g/n/ac, 803.11d and 802.11i WPA2, WMM, WMM-UAPSD, L2TPv3, Client VPN, MESH, Captive Portal server
	QUALITY OF SERVICE (QOS)	– WMM, WMM-UAPSD, 802.1p, Diffserv and TOS
I/O	ETHERNET CONSOLE PORT DISCRETES	2x 10/100/1000Base-T (Auto-sensing) RS-232 – Input: Radio Disable/Enable; Power Supply On/Off – Output: – Power Supply Status; Radio Status – Fail-over feature for CWAP downstream fault recovery
I/O CONNECTORS	J1 J2 ANTENNAS	– Main power input, Aircraft Discretes (weight-on-wheels interface), Console port (RS-232, USB, VGA), Strapping Options – Ethernet: 4-way Quadrax – optimized internal antenna – J3-J8: 6x SMA-RP enabled via J1 strapping options
PHYSICAL DIMENSIONS	(HEIGHT X DEPTH X WIDTH)	2.34" x 6.82" x 10.67" (59.43mm x 173.23mm x 270.92mm)
WEIGHT		4.3 lbs / 1.9kg
POWER		115VAC / 360-800 Hz with 200msec Hold-up; 20W Nominal
ENVIRONMENTAL		Cooling-sealed natural convection, Qualified to DO-160G (pending)

ORDERING INFORMATION

ARTICLE	PART NO.	DESCRIPTION
Cab-n-Connect A100	73001011-001	802.11ac Wireless Access Point

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