Cab-n-Connect™ A200

802.11ax WiFi 6
Cabin Wireless Access Point

- Advanced Tri-Radio Technology including internal integrated antennas, Adaptive Intelligent RF Monitoring & Management features
- Backwards compatible to 802.11 a/b/g/n/ac
- Dedicated Smart Sensor Radio for continuous security and performance
- Highest Level of Security with WPA3 security certifications
- Qualified to DO-160G

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Product Highlights

Cab-n-Connect™ A200

The latest generation Cab-n-Connect A200 provides the highest level of efficiency and performance based on 802.11 ax WiFi 6 technology, optimized for video streaming in dense multi-client applications within the aircraft cabin. With aggregated data rates up to 4.8 Gbps in the 5 GHz band and concurrent 2.4 Gbps in the 2.4 GHz band, this next gen A200 CWAP is optimally suited for high density environments, providing intelligent edge capabilities with the highest level of client services without compromising security monitoring. The A200 is the only avionics certified CWAP that provides a dedicated, dual-band sensor that continuously scans and can detect security threats real-time eliminating the risk of vulnerability or attacks, while also optimizing RF performance automatically. The A200 delivers the highest level of security services, beginning with support for the Wi-Fi Alliance WPA3 security certifications and also provides a stateful L2-L7 DPI firewall for context based access security.

The onboard WiNG 7 Enterprise software provides the most comprehensive and robust services in the industry. Its SMART-RF module intelligently adapts to the aircraft environ--ment 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. Its Intelligent beamforming creates the most efficient path for data transmission between an access point and a client device creating an optimized communication path for stronger and faster data transmission. This improves throughput performance and results in battery power savings on the client device. With more users, more devices, more things, more applications and more threats straining the aircraft infrastructure, the A200 was engineered to meet those ongoing challenges in the aircraft cabin. The A200 combines powerful 802.11ax Wi-Fi 6 technology, advanced security and ML/AI management capabilities together into an enterprise class solution that allows you to deploy high speed, highly secure Wi-Fi into the toughest aircraft environments.

Technical Information

RADIO OPERATION	TRI-SOFTWARE-SELECT-ABLE-RADIOS (SSR): MODULATION RATES	– 2.4 GHz/5 GHz or Dual 5 GHz Multi-User MIMO (MU-MIMO) with Dedicated 2.4G Hz/5 GHz Sensor Radio – 802.11ax: OFDMA (10 24-QAM) – 802.11ac: OFDM (BPSK, QPSK, 16-QAM, 64QAM, 256-QAM) – 802.11ac Packet Aggregation: A-MPDU, A-MSDU 80 2.11ac Very High- Throughput (VHT): VHT20/40/80 – 802.11ac Advanced Features: LDPC, STBC, Maximum Likelihood (ML) – 802.11n: OFDM (BPSK, QPSK, 16-QAM, 64-QAM) – 802.11n High-throughput (HT) support: HT 20/40 802.11n – Packet aggregation: A-MPDU, A-MSDU 802.11 – Advanced Features: LDPC, STBC and Tx BF
	DATA RATES	– 802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps – 802.11n: (2.4 GHz); 6.5 to 300 Mbps (MCS0 to MCS15, HT20 to HT40) – 802.11n: (5 GHz); 6.5 to 300 Mbps (MCS0 to MCS15, HT20 to HT40) – 802.11ac: (5 GHz) 6.5 to 3467 Mbps (MCS0 to MCS9, NSS=1 to 4, VHT20 to VHT160) – 802.11ax: (2.4 GHz): 3.6 to 574 Mbps (MSC0 to MSC11, NSS = 1 to 2, HE20 to HE40) – 802.11ax: (5 GHz): 3.6 to 4800 Mbps (MSC0 to MSC11, NSS = 1 to 4, HE20 to HE160)
	CLIENTS PER RADIO	– 256 clients per radio | 512 clients total – BLE 5 Radio Bluetooth® Low Energy (BLE) and IEEE® 802.15.4 compliant
RADIO APPROVALS		FCC CFR 47 Part 15, Class B, ICES-003 Class B, FCC Subpart C 15.247, FCC Subpart E 15.407, RSS247, EN 301 893, EN 300 328, EN 301 489 1 & 17, EN 50385, EN 55032 (CISPR 32), EN 60601-1-2
ANTENNAS		– 7x integrated Omni-Directional Antennas
SOFTWARE		WiNG 7 Enterprise Operating System provides a high-level of flexibility and scalability within a dense cabin aircraft environment offering extensive policy framework, analytics, intelligent automation, optimized streaming video, and seamless roaming within the network. – Supports touchless field loadable software/updates – Automatic Failure Recovery with dual image configuration Optional: Air Defense enhanced security software provides additional level of security features, analytics, etc.
SECURITY		Stateful L2-L7 DPI Firewall, IP filtering, NAT, 802.1 x, 802.11i, WPA3, WPA2, WPA Triple Methodology Rogue Detection: 24x7 dual-band WIPS sensing, on-board IDS and secure guest access Hotspot 2.0 with captive portal, IPSec and RADIUS Server and VLANs

Technical Information

RF MONITORING		Dedicated 3rd Sensor Radio that Intelligent monitors and detects security issues while also intelligently (AI/ML) adjusting RF power and channels via WiNG ExtremeAI & SmartRF
WIFI ALLIANCE CERTIFICATIONS		WPA™ - Enterprise, Personal; WPA2™ - Enterprise, Personal; WMM® - Power Space
I/O	J1 J2	– Input Power, Discrete I/O: Radio Disable/Enable; PWR On/Off; Status, Console (RS-232), IP Strapping – 1x 10/100/1000 Mbps auto-negotiation Ethernet, 1x 100/1000/2500 Mbps auto-negotiation Ethernet – Supports Daisy-Chain and Fail-over feature for CWAP downstream fault recovery
POWER		115 VAC/360-800 Hz Aircraft Grade power with 200 msec Hold-up; 25 W Nominal
ENVIRONMENT & EMI		Qualified to DO-160 G (see qualification test report)
SIZE / DIMENSIONS	H x W x D	2.82" (74 mm), x 10.0" (254 mm), x 8.0" (203 mm)
WEIGHT		4.4 lbs (2 kg)
OPERATING TEMPERATURE		-15 °C to +70 °C

Ordering Information

ARTICLE	PART NO.	DESCRIPTION
CWAP, A200, US, LAB	73001013-000	LRU, CWAP, A200 US, LAB
CWAP, A200, WR, LAB	73001013-001	LRU, CWAP, A200 WR, LAB
CWAP, A200, US	73001013-100	LRU, CWAP, A200 US
CWAP, A200, WR	73001013-101	LRU, CWAP, A200 WR
CABLE KIT, A200, LAB	73001013-500	LAB CABLE KIT, A200

About Kontron

Kontron is a global leader in IoT/Embedded Computing Technology (ECT) and offers individual solutions in the areas of Internet of Things (IoT) and Industry 4.0 through a combined portfolio of hardware, software and services. With its standard and customized products based on highly reliable state-of-the-art technologies, Kontronprovides secure and innovative applications for a wide variety of industries. As a result, customers benefit from aceerated time-to-market, lower total cost of ownership, extended product lifecycles and the best fully integrated applications.

For more information, please visit: **www.kontron.com**

Your Contact

Kontron Canada Inc.

4555 Rue Ambroise-Lafortune
Boisbriand (Québec), J7H 0A4, Canada
Tel.: (800) 387-4222
avionics@kontron.com

www.kontron.com

Your Contact

Kontron America Inc.

9477 Waples Street
San Diego, CA 92121, USA
Tel.: +1 888 294 4558
avionics@kontron.com

www.kontron.com

Global Headquarters

Kontron Europe GmbH

Gutenbergstraße 2
85737 Ismaning, Germany
Tel.: +49 821 4086-0
info@kontron.com

www.kontron.com