

LIGHTWEIGHT COMPUTING AND COMMUNICATIONS DEVICES

Appareo’s telematic and connectivity solutions for aviation include highly-capable, well-connected mobile computers. The Aircraft Communication Units (ACUs) in the Conexus® product line are lightweight and affordable computing and communications devices for a broad range of aircraft types.

TECHNOLOGY APPLICATION

Conexus ACU devices utilize many wireless connectivity platforms including: Wi-Fi, Bluetooth, Ethernet, Cat 4 LTE Cellular, 2G and 3G Cellular GSM, Iridium SBD, 433 MHz, and controller-area networking (CAN). These systems can pull data directly from ARINC 429 data busses or, for legacy aircraft, utilize the ACU device’s onboard IMU and GPS to compile its own attitude, heading, speed, and position data.

Conexus ACU devices can be paired with custom Appareo applications for aircraft connectivity for pilots, owners, and operators. Additionally, aircraft and fleet data is available to manufacturers and is uploaded at the conclusion of each flight.



AIRCRAFT COMMUNICATIONS UNIT ACU-200

Available today, the ACU-200 was designed to DO-160G and is shipping as Type or Supplemental Type certified. For customers that prefer to internally develop software on Conexus products, a software development kit (SDK) is available for simplified custom application development.

CONEXUS® ACU-200 FEATURES

- Dual-core ARM cortex A9 processors
- 512 MB DDR3L RAM
- 32 GB eMMC standard storage
- LTE CAT 4 cellular radio with 3G/2G fallback
- Short-range 433 MHz radio
- Bidirectional communication
- 100BASE-TX 10/100 ethernet
- Digital input
- Discrete outputs
- RS-422
- Inertial measurement unit & GPS
- Trusted platform module
- Secure boot
- Low power mode
- Ultra-Low power sleep mode
- Weighs less than 2 pounds

REGULATORY & CERTIFICATIONS: Verizon Network, Vodafone, CE, IC, FCC, RCM

POSSIBILITIES

The Conexus line of aircraft communications devices can also be paired with other Appareo products such as the cockpit image and audio recorder Vision 1000, and the crash-hardened, fire-protected Recoverable Data Module (RDM-300) for a complete data capturing, monitoring, recovery, and telemetry system.