

FLIGHT DECK DATA LINK DELIVERING COMPLIANCE AND EFFICIENCY

Meeting CNS/ATM requirements



For today's challenging CNS/ATM environment, we have developed the state-of-the-art communication management unit (CMU) for data link operation. Its digital technology offers faster integrated communication management and unprecedented flexibility and growth.

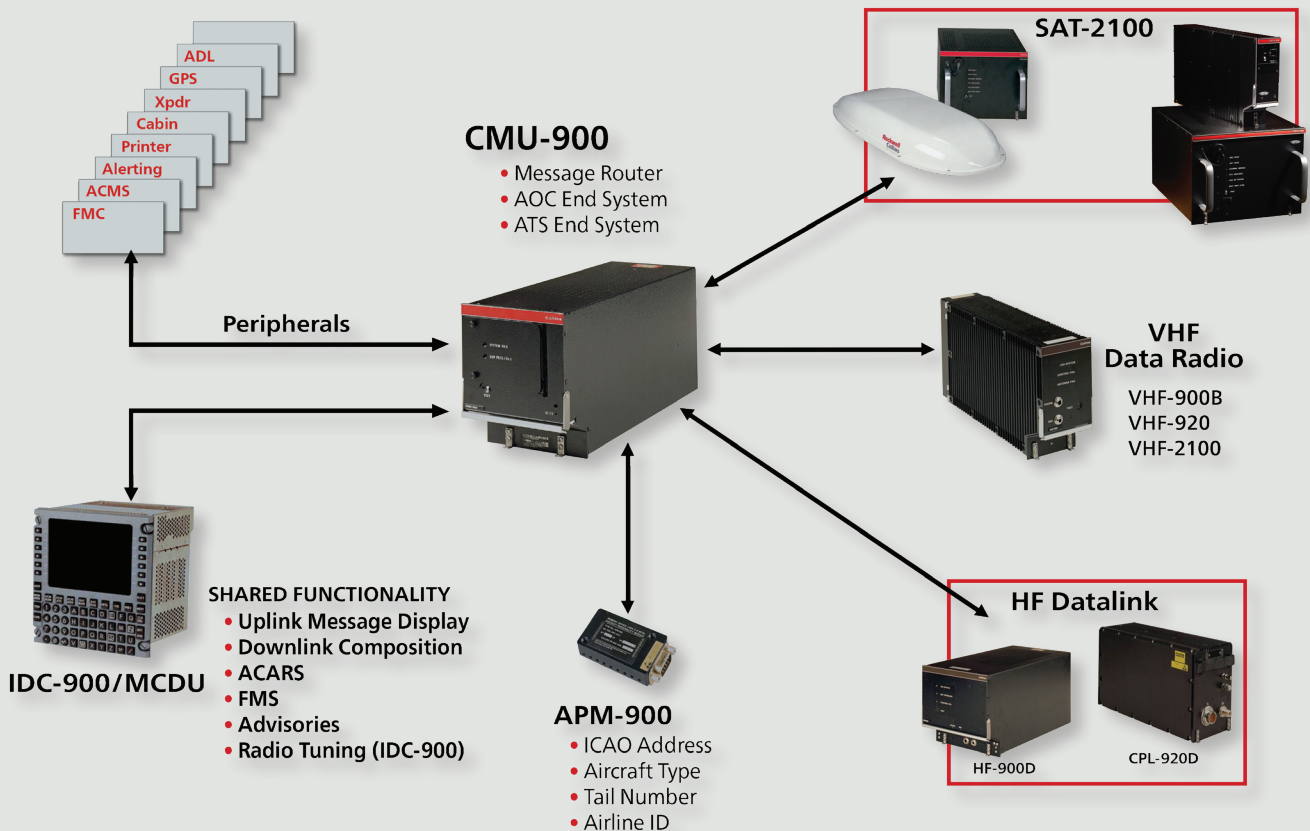
Our CMU is an ARINC 758-compliant data link router, interfacing with many aircraft systems, such as ACMS/DFDAU, SATCOM, VHF, HF DL, FMS and other aircraft systems. It is designed to support current and future airspace operations, including industry-leading implementations for AOC data link such as Plain Old ACARS (POA), AVL and VDL Mode 2. It also includes industry-leading implementations of ATC data link, such as FANS, ADS-C, AFN, CPDLC and ATN CPDLC.

Components include the hardware platform, core software, airline operational control (AOC) application function, and the optional ATN Air Traffic Control (ATC) data link functions. The AOC application data is certification-independent and user-programmable. Updates to the core software and AOC application may be accomplished using an ARINC 615 data loader.

CMU-900 ATC DATA LINK CAPABILITIES

The CMU's ATN router and CPDLC applications are certified. Hundreds of aircraft fly today with ATN CPDLC capability, and all of them have the CMU. It is compliant with ATN: ICAO SARPs, ED/DO documents and applicable FAA ACs.

Our CMU is also being used every day in support of FANS operations and is Boeing FANS 1 AEIT-certified. It is the communications router for the FANS applications (ADS-C, AFN, CPDLC) and interfaces to all the physical layers (HF DL, SATCOM, VDL Modes A, 1, 2) in support of worldwide FANS operations.



SUMMARY OF CAPABILITIES

- Supports encryption and compression
 - CRC is calculated to ensure message integrity
 - Secure communication of ACARS messages
- Boeing FANS-1 AEIT-qualified
- Certified via TC and STC on most aircraft types in various software configurations
- Core software
 - Certified software configuration
 - › Digital and discrete IO
 - › Peripheral and uplink/downlink routing
 - › ACARS over AVLC (VDL Mode 2) - optional
 - › ATN router - optional
 - › Software dataload for Core, AOC, and VM data
 - › ATS application
 - › Technical application
- AOC application
 - User modifiable without certification impact
- Vendor modifiable data
 - Collins modifiable without certification impact
- AOA and VDL M2 avionics are certified and available
- ATN/CPDLC avionics are certified and available

OUR INNOVATIVE AVIONICS SOLUTIONS ARE DESIGNED TO INCREASE YOUR OPERATING EFFICIENCY, START TO FINISH.

- Shorter aircraft turnaround times
- More accurate reporting of aircraft movements
- Maximum crew utilization
- More efficient flight dispatching
- Offering access to data link mandate airspace
- Reduced engine maintenance costs
- Faster response to flight delays and diversions

SPECIFICATIONS: CMU-900

Weight	12 lb maximum (5.5 kg)
Size	4 MCU per ARINC 600
Mount size	2 Shell NIC 600
Power	Primary 115 V ac; 400 Hz Optional 28 V dc Usage <35 W
Power interrupt	Play-through 600 mS
Warm start	No limit
Environmental	Qualification RTCA DO-160C Temperature -40 to +55 °C Cooling ARINC 600, 404

Input/output	
ARINC 429	Transmitters 15 Receivers 46
Analog	Discrete inputs 29 Discrete outputs 16 Discrete inputs/outputs 2 Analog inputs 6 VHF (MSK audio) 1 Serial outputs 4 Serial inputs 2 Relay contacts 2

To learn more, go to

→ collinsaerospace.com/CMU900