CMU MARK II+
DATA COMMUNICATIONS

Optimizing Critical Communications Data for Airlines

Honeywell

UNLOCK OPERATIONAL EFFICIENCY
THROUGH THE CMU MARK II+

The CMU Mark II+ is an avionics data router that supports FANS CPDLC, ATN PM-CPDLC, and ACARS functionality. The CMU Mark II+ provides access to "big data" from onboard avionics systems, enables analytics that improve fuel efficiency and ensure schedule integrity, and facilitates operational efficiencies for large fleet operators.

SUPPORT FOR ALL MODERN CIVIL DATACOM SYSTEMS

Honeywell's communication management unit (CMU) Mark II first entered the market in 1994 and was upgraded with modern processing capability and software to CMU Mark II+ in 2011.

Honeywell's CMU Mark II products have become the most popular datalink units in the market, with two product variants to support ARINC 724B aircraft wiring or ARINC 758 wiring. Some of the most sophisticated ACARS users in the world rely on the CMU Mark II+ to utilize modern DataCom networks, lean out fleet operations, and simplify pilot interfacing.

The Mark II+ incorporates hundreds of features within a partitioned software architecture; each partition is software-loadable on-wing using data loaders or PCMCIA media. The Mark II+ provides ATN PM-CPDLC capability that is approved by the Eurocontrol white list and is designated best-in-class for PM-CPDLC operation in Europe.

The CMU Mark II+ also supports FANS-1/A+ used in US airspace and oceanic regions, and includes VHF Datalink Mode 2 Multi-Frequency capability required for the FAA Next Gen DataCom program.

KEY HONEYWELL FACTS

1. CMU Mark II entered into service in 1994.

2. CMU Mark II was updated to Mark II+ in 2011 to enable ATN PM-CPDLC.

3. CMU Mark II+ supports both ARINC 724B and ARINC 758 wiring.

4. CMU Mark II+ is certified on multiple air transport and business jet platforms.

5. Over 7,000 aircraft rely on the proven performance of CMU Mark II+ today.

CMU MARK II+ SPECIFICATIONS

Size	4 MCU per ARINC 600
Weight	12 lbs (5.44 kg) Max.
Power Requirements	115 VAC 400 Hz or 28 VDC. 30 Watts Max.
Connector	ARINC 724B or ARINC 758
Environmental	DO-160C, no forced-air cooling required
Mark II+ CMU Configurations	PN 965-0758-005 (ARINC 724B) PN 965-0758-006 (ARINC 758)
Aircraft Personality Module (APM)	PN 964-0465-001
Design Assurance Level	DO-178B DAL C
Reliability	30,000 Hours
Warranty	3 Years
Certified Platforms	B737MAX/NG, B747, B757, B767, A320, A321, SSJ-100, MC-21, CRJ-550/700/900; F900, CL-601, Citation X and multiple additional Business Jet platforms

KEY HONEYWELL ADVANTAGES:

GAIN ACCESS TO PREFERRED OCEANIC TRACKS

Aircraft that fly between Europe and North America can access preferred flight lanes within the North Atlantic Tracks that have favorable winds that reduce flight duration and fuel cost. The CMU Mark II+ supports Performance Based Communications and Surveillance (PBCS) requirements required for North Atlantic Track and Pacific Track systems.

MINIMIZES ACARS FEES

The Aircraft Communication Addressing and Reporting System (ACARS) data fees an operator pays to communication services providers such as ARINC, SITA, Avicom, and ADCC can be expensive. The CMU Mark II+ provides options within a highly-configurable Airline Operational Control database to minimize ACARS data fees during all phases of flight.

ACARS DATA COMPRESSION

The CMU Mark II+ contains patented ACARS Data Compression technology that reduces the size of non-safety messages up to 40%, which enables significant cost savings on ACARS data fees. The technology is available for use with VHF, HF, and Satcom data links. Honeywell customers see an average data compression of 20%+, with up to 40% on large messages such as engine and maintenance reports.

HIGHLY-CONFIGURABLE MESSAGE ROUTING PREFERENCES

Air and ground data links can be assigned a cost and preference order, which allows transmission of non-critical messages to be queued until a low-cost link is available. Message routing preferences can be defined for all global regions the aircraft fleet operates.

NO EXPENSIVE CONTRACTS WITH COMMUNICATION SERVICE PROVIDERS REQUIRED

Our latest CMU MKII+ enables a new ATN-Only mode of operation for European operators that must comply with the ATN PM-CPDLC mandate, but don't want to sign up for an ACARS data contract with ARINC or SITA. ATN-Only mode enables ATN PM-CPDLC messaging in the CMU and inhibits all other ACARS messaging. ATN-Only customers work with the European air navigation service provider(s) (ANSPs) so the ANSP covers the cost of ATN messages across the ARINC and SITA networks—thereby relieving the airline of establishing an expensive ACARS data contract. When ready to start using AOC messaging, our Honeywell Datalink Services can help.

HONEYWELL DATALINK SERVICES IS HERE TO HELP

The Honeywell Datalink Services team is a core group of experts that collaborates directly with Honeywell customers to tailor CMU Mark II+ capabilities to your specific operational requirements. The Datalink Services team can take the complexity out of ACARS customization by listening to your operational needs, developing a custom AOC database, and testing the database before deployment to your fleet. AOC databases are easily-loadable on-wing and do not require aircraft certification. Contact DatalinkServices@Honeywell.com for further information.

More information about Honeywell's Mark II+ Communications Management Unit can be found at:
https://aerospace.honeywell.com/en/products/navigation-and-sensors/mark-ii-communications-management-unit

Contact your Honeywell Aerospace Technical Sales Manager or Customer Business Manager for complete details on CMU Mark II+ capabilities, equipment availability, and STC access.

The Datalink Services team is available to provide customer support for questions and ACARS/AOC configuration support. For more information contact DatalinkServices@Honeywell.com.

For 24/7 technical support for all your Honeywell Aerospace products contact AeroTechSupport@Honeywell.com.

THE
FUTURE
IS
WHAT
WE
MAKE IT
—

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