



ALQ-213(V) ELECTRONIC WARFARE MANAGEMENT UNIT



Combined controller and control unit

Terma's ALQ-213(V) Electronic Warfare Management Unit (EWMU) offers a versatile, independent solution for military Aircraft Survivability Equipment (ASE) suites. The EWMU is available in both DK (non-ITAR) and US (ITAR) versions.

The ALQ-213(V) EWMU belongs to Terma's family of controllers, in service on 2,500+ aircraft, counting 25+ different platform types operated by more than 15 different countries around the globe.

The ALQ-213(V) EWMU combines a small form-factor with a powerful platform and cockpit control unit for easy integration of any ASE sensor or effector system, as well as aircraft core functions thanks to its many configurable interfaces and robust computing capability.

A Terma integrated ASE suite allows for selection of enhanced functions for optimization of performance through Automatic Threat Response / Decision Support algorithms and an extensive Embedded Training function – all fully user programmable.

Technical description

The fully NVIS compatible ALQ-213(V) EWMU is designed for easy cockpit and aircraft integration via standard dzuz mounting. The EWMU is built using low-power consuming components and thus no forced air cooling is required.

The architecture is centered around a powerful multi-core CPU for hosting of customer applications and a large Field Programmable Gate Array (FPGA). Terma's software components fielded with a high integrity Real-Time Operating System provide generic application programming interfaces and allow for firewalled integration of safety critical avionics systems with the applicable ASE suite of systems and secure data management.

The EWMU is prepared with a vacant expansion slot to allow drop-in of additional capabilities with minimal impact to the unit design.



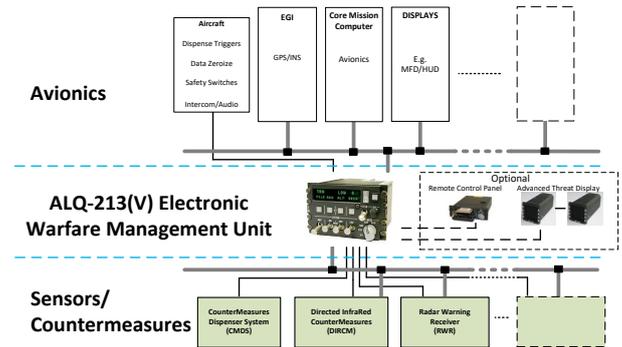
Typical application

The EWMU typically integrates a number of ASE sensors and effectors via MIL-STD-1553B, Ethernet or serial interfaces in combination with discrete power control signals. Depending on the application, the EWMU may integrate cockpit Multi-Function Display and Control Units as applicable or provide graphical Human Interaction via Terma's Advanced Threat Display.

Available sources for time, position, and attitude data is normally centrally integrated by the EWMU which in turn provides low-latency data in any required format to the applicable systems and functions of the ASE.

General technical overview

Processor	Multi-core processing with HW supported encryption
FPGA	75000 logic cells
Volatile memory	512 MiB
Non-volatile memory	1 GiB
MIL-STD-1553B	3 ea.
Ethernet	1 ea. 100 Base-T 1 ea. 1000 Base-T
ARINC-429	2 ea. input
Discretes	60 ea.
Audio	1 ea. Analog output
Special	1 ea. PPD input/output 1 ea. analog input 3 ea. hardware interlocked arm/safe signals
Power	28VDC, Max. 40W
Weight	2.0 kg max. (4.4 lbs)
Dimensions (l x w x h)	173x146x95mm (6.8x5.75x3.75")



Alternatives within the Terma controller family



- Avionic bay installation
- Small / lightweight
- Versatile interfaces



- Avionic bay installation
- Hosts related functions e.g. PIBU
- Multi CPU provisions