

LOCKHEED MARTIN



AN/UYQ-70
Mission Critical Enclosure
(MCE)



**AN/UYQ-70****Mission Critical Enclosure
(MCE)**

Mission Critical Enclosure will be installed aboard AEGIS ships to support successive generations of AEGIS combat system computing requirements. Electronic subassembly equipment installed within the enclosure will utilize Commercial Off-the-Shelf (COTS) computing equipment. MCE provides a shock and vibration isolation system which allows COTS technology to operate in severe military environments.

The water-cooled thermal management system reduces the internal air temperatures to COTS levels. The input power systems handle unique military power requirements which allow COTS power supplies to be used. Simply stated, this enclosure solves the critical problems associated with making COTS technology operate in a mission-critical naval environment.

*MCE Specifications***Physical Sizes**

External:

- 75" high
- 28" wide
- 36" deep
- 2,000-lb total weight

Internal (isolated):

- 19" RETMA rack
- 32U (56") rack height
- 24"-deep rack
- 600-lb payload capacity

Environment

Shock:

- Internal rack isolated to 10 g's in three principal directions
- MIL-S-901D heavyweight test, Class I and Class II
- 12-16 Hz deck frequency

Vibration:

- Internal rack isolated to 1.4 g's (5-10 Hz) and .7 g's (11-25 Hz) in three principal directions for MIL-STD-167 vibration test
- 5-25 Hz input

Thermal:

- 4.8kW cooling capacity with:
 - 21.11 to 24.44°C input water
 - 50°C maximum external air temperature
 - 35°C maximum internal ambient air temperature
 - 1,000 cfm normal operation
 - 700 cfm with one fan failure
- Drip, humidity, EMI, magnetic immunity tested

Electrical

Power:

- 110 V, 60 Hz, single-phase ungrounded dual input, capacity for 8 double pole circuit breakers
- Capacity for 96 parallel channel I/O
- Control panel, external

Technology Insertion

- Full management technology evaluation program for all users
- Open architecture provides ease of technology insertion
- SICV laboratory-supported testing of a technology before deployment

Integrated Logistics Support

- Full logistics management for support of all users
- Around-the-clock global fleet technical support center available
- Just-in-time support inventory
- All levels of logistics products provided (e.g., technical manuals, maintenance processes and procedures, ICDs)
- Training courses and materials for users

For more information, contact:

AN/UYQ-70 Marketing

Lockheed Martin

P.O. Box 64525

St. Paul, MN 55164-0525

(651) 456-3778

Web Page: www.Q70.com

ITAR Warning: This product subject to the international traffic in arms regulations, contained in 22 CFR 120-130, prohibiting transfer to foreign nationals without a valid U.S. State Department export license. Violations are punishable by both civil and criminal penalties which may be severe.