

# ELECTROMET

## Critical Enclosure Design Specifications

Additional information can be found at [www.electromet.com](http://www.electromet.com)

### 1. What is the intended functional use for the enclosure?

- Surface Ship
- Submarine
- Aircraft
- Mobile Vehicle
- Land Based

### 2. For Defense applications, identify ALL MIL-specifications and MIL-standards to be met

### 3. Survivability:

- What environmental conditions are required to be met?
  - Shock (MIL-S-901D) \_\_\_\_\_
    - Deck Frequency of concern (Hz) \_\_\_\_\_
    - System designation Type \_\_\_\_\_ Grade \_\_\_\_\_
    - Mounting requirement:
      - o Hard Deck Mounted \_\_\_\_\_
      - o External Isolation System \_\_\_\_\_
      - o Internal Isolation System \_\_\_\_\_
    - Preferred Test Method
      - o Barge \_\_\_\_\_
      - o Shock Machine \_\_\_\_\_
    - How fragile is the electronic equipment to be installed?
      - o Is there a maximum G-load to consider?
  - Vibration (MIL-STD-167) \_\_\_\_\_
  - EMI/RFI \_\_\_\_\_
    - Frequency Range(Hz) \_\_\_\_\_
    - Attenuation (db) \_\_\_\_\_
  - Salt Spray \_\_\_\_\_
  - Drip Proof \_\_\_\_\_
- Who is responsible for testing?
- Who approves the test configuration and test plan?
- Will simulated weights be used?
- Who is responsible for generating the post-test report?

**4. Enclosure Configuration:**

- What is the weight and center of gravity (CG) for each set of electronic equipment to be installed in the enclosure?
- What is the total electronic equipment payload?
- Will cables be supported by the enclosure rear panels?
  - o If **YES**, what is the cable/harness payload?
- Will cables enter the enclosure from the base?
- Is front accessibility **only** required?
  - o Will rear access be required?
  - o Will maintenance and repair be accomplished via front access only?

**5. What are the enclosure's maximum outside dimensions?**

- H \_\_\_\_\_
- W \_\_\_\_\_
- D \_\_\_\_\_

**6. What are the enclosure's required useable inside dimensions?**

- H \_\_\_\_\_
- W \_\_\_\_\_
- D \_\_\_\_\_

**7. Will the enclosure have?**

- Side Panels \_\_\_\_\_
- Rear Panels \_\_\_\_\_
- Front Door \_\_\_\_\_ Hinged (R/L) \_\_\_\_\_
- Rear Door \_\_\_\_\_ Hinged (R/L) \_\_\_\_\_
- EIA Holes: Front \_\_\_\_\_ Rear \_\_\_\_\_
- Drip Proof Requirement \_\_\_\_\_
- Humidity Requirement \_\_\_\_\_

**8. Will the enclosure need any of the following Protective Coatings or Markings?**

- Chem Film \_\_\_\_\_
- Primer \_\_\_\_\_
- Paint \_\_\_\_\_ Color \_\_\_\_\_
- Silkscreen \_\_\_\_\_ Color \_\_\_\_\_
- Engraving \_\_\_\_\_ Fill Color \_\_\_\_\_
- Stencil \_\_\_\_\_ Color \_\_\_\_\_
- Steel Stamp \_\_\_\_\_
- UID/RFID \_\_\_\_\_
- Other \_\_\_\_\_

**9. Will the enclosure require any of the following documentation?**

- MIL-T-31000 \_\_\_\_\_ Level \_\_\_\_\_ QTY \_\_\_\_\_
- Top Assembly Drawing \_\_\_\_\_
- Interface Control Drawing \_\_\_\_\_

**10. Is there a design review requirement?**

- Preliminary \_\_\_\_\_
- Critical \_\_\_\_\_
- Facility Review \_\_\_\_\_

**11. What are the required construction materials?**

- Aluminum
- Steel
- Stainless Steel
- Composite materials

**12. Will the enclosure need any of the following specialized hardware / accessories?**

- Blowers: Type \_\_\_\_\_ CFM \_\_\_\_\_
- Filters:
  - Type \_\_\_\_\_
  - EMI/RFI \_\_\_\_\_
  - Attenuation \_\_\_\_\_
  - Drip Proof \_\_\_\_\_
  - Dust \_\_\_\_\_
- Slides:
  - Quantity \_\_\_\_\_
  - Payload Weight for Each \_\_\_\_\_
  - Slide Travel Distance for Each \_\_\_\_\_
- Cable Retractors \_\_\_\_\_
- Cable Trays \_\_\_\_\_
- Shelves \_\_\_\_\_
- Gasketing:
  - EMI/RFI \_\_\_\_\_
  - Moisture \_\_\_\_\_