

# Shock Isolated Rack for Mission Critical Applications

Suitable for Deployment of COTS Equipment in Airborne Applications

Will also support applications on land and sea.

## Features

- ◆ Lightweight Aluminum Construction
- ◆ Meets Mil-STD-810F and 461E
- ◆ Removable Heavy Duty Lifting Eyes
- ◆ 18G rated Floor Mounting Flanges
- ◆ Removable Front and Rear Doors
- ◆ Generous recessed I/O Panel Space
- ◆ Recessed Mains Power Entry Panel
- ◆ 4ea, 108CFM, 12VDC Exhaust fans
- ◆ EMI Shielded Front to Rear Air Path
- ◆ 17U of interior Rack Space
- ◆ Internal Shock Isolators may be sized for payloads between 50 and 250 lbs.
- ◆ Fully assembled, wired and tested



SIR-6500 with 9U Chassis Mounted

## Overview

Dawn's SIR-6500 Shock Isolated and Fully Shielded Equipment Rack was designed to meet airborne requirements but its design is also capable of supporting deployed COTS systems on land or sea.

Weighing in at a mere 200 lbs, It's robust Crash Safety Shock design supports payloads of COTS equipment between 50 and 250 lbs with a floor mounting system designed to meet a 18G crash rating.

Shock isolation is provided by 12 isolators sized for the payload to be deployed. Heavy duty removable lifting eyes are provided on top of unit to help transport the rack to the deployed site. Four fans are mounted on upper rear door and fan power supply is provided to move in excess of 400CFM through the unit. Doors are easily removable for aid in installation and set up of equipment.

Interior mounting space accommodates up to 17U Height x 20"D of 19" rack mounted equipment. Generous panel space is provided for both I/O and power entry.

## Technical Specifications

### Mechanical

**Compliance:** EIA 310

**Crash Safety Shock:** Meets MIL-STD-810F (3)  
Method 516.3 Procedure 1

**Mounting:** 4 each floor mounting flanges provided  
designed to survive 18G crash

**Lifting:** 1/2" removable eyes provided at top 4 corners

**Access:** Front and Rear, removable, EMI shielded doors

**Material:** Aluminum Alloy 6061-T6

**Finish Interior:** Chem Film, Per MIL-C-5541F, Class 1A

**Finish Exterior:** Paint, Black, Other Colors Available on Request

**Exterior Dimensions:** 37.75"H x 28.62"W x 32.88" D

**Interior Dimensions:** 17U H x 19" Rack W x 20" D

**Weight:** Approximately 200 lbs.

### Electrical

**Input Power:** Recessed panel provided to mount input  
power connector of choice

**I/O Provision:** 2 each deep drawn aluminum panels  
measuring 4.40" x 18.4" mounted on rear door

### Environmental

**EMI/RFI:** Meets MIL-STD-461E

**Storage Temperature:** -40°C to +100°C

**Operating Temperature:** -20°C to +85°C

**Operating Environment:**

Non-pressurized Flight, Sea level to 15,000 feet

Pressurized Flight, Sea level to 65,000 feet

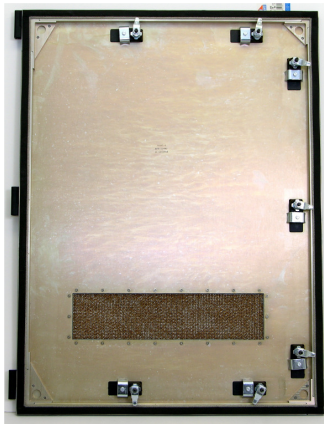
**Humidity:** <95% non-condensing

**Cooling:** Four (4) 108 CFM Fans, Air Path Front to Rear

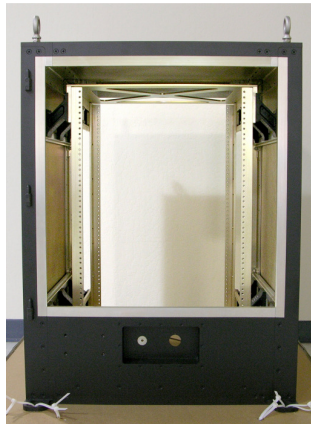
## Ordering Information

11-1016500 – X X X X (Reserved for Future Options)

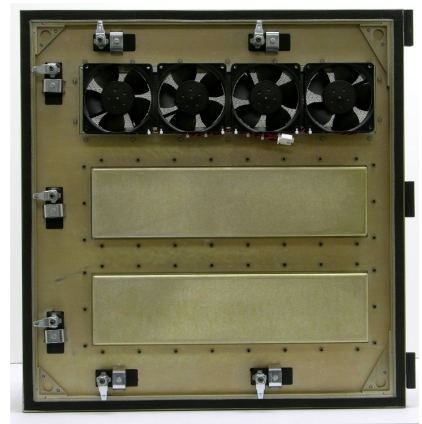
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Front Door, Air Filter, Latches



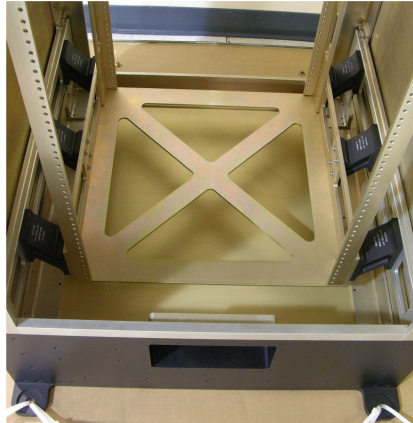
Pwr Input, Mtg Flgs, Lift Eyes



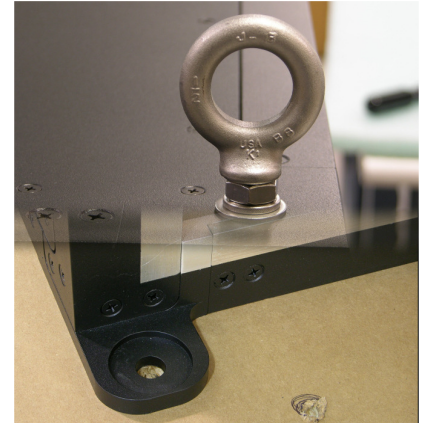
Rear Door, Fans, I/O Panels



Latch, EMI Gasket, Air Seal



Shock Isolators at Bottom of Rack



Lifting Eye and Mounting Flange

### Other Products and Services Available from Dawn:

- Conceptualization, design and production of custom enclosures and backplanes.
- Conduction or Convection Cooled ATR Chassis Design and production
- Thermal Design and Analysis
- Microprocessor based sensor monitoring and control.
- Technologies Supported: cPCI 2.1, cPCI 2.16, PXI, VME, VME64, VME64x, VXI, VXS(Vita 41), VPX(Vita46), VPX Redi(Vita48), Open VPX(Vita65)

### About Dawn:

Dawn is a certified veteran owned small business based in Fremont, CA. serving the real time computer and embedded systems market.

Dawn specializes in conceptualization, design, and production of high-technology enclosures and backplanes for thousands of companies within the commercial, industrial, aerospace and defense markets. Our customers consist of Major OEM's, National Labs, Universities, aerospace and defense contractors, our competitors and the U.S. Government.

Our Quality Standards are designed and tuned to support the needs of the vast market we serve.

Dawn celebrated its 25<sup>th</sup> anniversary of business on February 19, 2010.