

# Rugged Power Supply Distribution Board

## PRODUCT DESCRIPTION

The Rugged Power Supply Distribution Board is an airborne conduction-cooled board in 6U custom VPX form factor. The board accepts 28V DC input voltage and generates multiple output voltages required as per VPX/VME standard. The board is designed to withstand harsh environments.

Variants of this board are used in the following airborne Electronic Warfare application

- Aerostat
  - Processing Electronics LRU (PE LRU)
  - Digital Processing LRU (DP LRU)
- Unmanned Aerial Vehicle
  - Processing Electronics LRU (LRU-UAV)
- AEW&CS Radar
  - S-Band Central unit (SBCU)

This board may also be used in other military applications.

## KEY FEATURES

- DC Input voltage 18-36V
- Input-Output voltage isolation > 1.5kV
- Remote power-ON
- Board provides output voltage for RF and digital
- Peak to peak ripple < 10mV
- Board provides all VPX and VME voltages from a single source
- Upto 500W power handling
- Protection for
  - Over temperature, over voltage, over current
- Voltage monitoring via power good indicator LEDs/logic signal to processor
- Variants offered
  - VME / VPX power supply board for digital systems (500W)
  - VPX power supply board for RF system with digital modules (350W)



## SPECIFICATIONS

### Hardware Configuration

- VICOR series (mini and micro) modules
- VICOR EMI filter

### Interfaces

- RS 422 for remote power-ON
- Status indicator LED on fascia-plate



### Additional information

- Output voltages
  - +6V DC (RF variant)
  - -6V DC (RF variant)
  - +12V DC
  - +5V DC
  - +3.3V DC

### MECHANICAL

- Conduction cooled board in 6U custom VPX form factor
- The board weighs 1.8 kg

### POWER CONSUMPTION

- Up to 500W power handling
- Input voltage is 28V (18 to 36V) DC

### ENVIRONMENTAL

- Qualification : MIL-STD-810E  
EMI/EMC compliance: MIL-STD-461E  
MIL-STD-704A/E/F
- Temperature range : -55°C and +125°C (Storage)  
-40°C and +70°C (Operational)

### PART NUMBER(S)

The following variants of this board are available:

CB10F0	VME / VPX power supply board for digital systems (500W)
CB10F1	VPX power supply board for RF system with digital modules (350W)

