

Mobile DC UPS

Mobile Data Power System



The Mobile Data Power, model MDP-25, is a DC UPS that solves the common problem of lengthy reboot sequences, system crash, data and hard drive corruption in mobile computer work stations due to a low voltage and loss of power as a result of intermittent or poor vehicle battery condition. In addition, the MDP provides a low voltage output warning signal to terminals (such as Motorola® MW 800 series work stations) allowing orderly automatic shutdown of the powered device, protecting data and preventing hard drive corruption.

Utilizing a high speed sensor circuit, when primary vehicle voltage drops below a critical point, the internal 9AH battery is switched on-line in milli-seconds, assuring no interruption to the powered device(s). The MDP-25 has an internal 3 step, temperature compensated charger that maintains its reserve battery at full charge, ready to go on-line when a fault or degradation of primary vehicle battery occurs. This functionality assures continued operation of mobile computers under a variety of adverse vehicle battery conditions.

Housed in a rugged aluminum case and heavy duty mounting plate, the unit is designed for installation in emergency vehicles, service and other utility vehicles that require a steady source of voltage for mobile computers, work stations, and electronics.

Protects mobile computers against system crash, lengthy reboot sequences, and loss of data due to:

- Voltage dip during engine cranking
- Voltage drop and decay due to loading high power accessories, and aging batteries
- Voltage loss due to cycling of master disconnect switch and battery failure.

Provides supplemental voltage in milli-seconds to mobile data devices when low vehicle battery is sensed.

- Immediately augments power to electronics when needed and fully powers electronics if critical low voltage condition persists.

Built-in Multi-Stage filter provides clean power required by mobile electronics

- Eliminates noise and interference
- Transient protection prevents damage to sensitive circuitry due to voltage spikes

Provides output warning signals to mobile computers (such as Motorola® MW 800 series work stations)

- Initiates low voltage shut down sequence in mobile computer, protecting data and hard drive.
- Alerts when system is operating on battery back-up

Internal 3 stage, temperature compensated charger maintains back-up battery in fully charge stand-by state.

- Provides isolated power source, 12 volts @ 5 amps for 60 minutes, 10 amps for 20 minutes, 25 amps for 8 minutes
- Battery easily accessed by front panel door

Model MDP-25

Input range: 10.2V – 15.5V (start-up @ 11.5V)

Standby Current Draw: <50mA

Output: 12 VDC

Maximum Load Current: 25 amps

Battery Connect Sequences

- Internal battery switches online when vehicle battery voltage = 10 V ± 1 V (Vehicle battery disconnects after 3 seconds if low voltage condition persists)
- Vehicle battery reconnects @ 11.5 V ± 1 V
- Internal Battery Low Voltage Disconnect: < 9.6 V

Battery Specification

- 9 AH, sealed Lead Acid – typical life 5 years, easily replaced via front panel access door.
- Power delivery @ > 10.2 volts @ 25°C
 - 5 amps @ 60 minutes
 - 10 amps @ 20 minutes
 - 25 amps @ 8 minutes

Output Signals for terminals (such as Motorola® 800 series work stations):

- When imminent Voltage decay to 11.5 VDC is projected (adjustable set point)
- On Charge/Discharge

Internal Battery Charger

- Charge Current: 2 amps max., three-stage (Bulk, Absorption, Float)
- Temperature Compensated

Temperature rating:

Operating 0 – 50° C

Mechanical:

- Aluminum case with access door for easy removal of battery
- Heavy duty mounting suitable for commercial vehicle use
- Size: 5.75" H x 6" W x 8.5" D; (14.6 x 15.24 x 21.59 cm)
- Weight: 9.4 lbs.

Options

- Remote LED indicator panel
 - Power OK
 - Operating on Back-Up



Powering the Network