

## IMPORTANT INSTRUCTIONS READ BEFORE USE

### VPS-210 Operating Instructions

This document describes the use and operation of the VPS-210 battery pack.

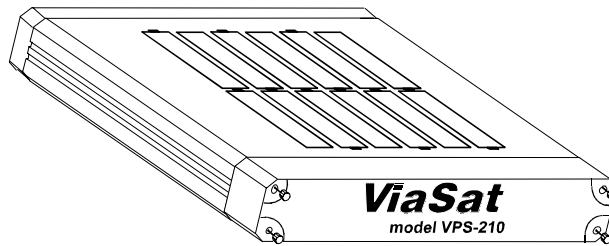
#### Packing List

The VPS-210 battery pack consists of the following items:

- Battery Pack
- Battery Pack Carrying Case
- 6 inch Power Cable

#### Description

The VPS-210 battery pack is designed to provide portable DC power to the VDC-200 Compact Data Controller. It uses 12 standard "AA" batteries.



**Battery Pack - Front View**

#### Operation

The battery pack is not rechargeable, however it may be used with rechargeable batteries (e.g. NiCad) if they are charged outside of the battery pack with a suitable charging device.

***Never connect the battery pack to a DC power supply.***

To prevent accidental connection of the battery pack to a DC power supply, the battery pack uses a different size power jack than the CDC. The battery pack cable *polarized* for this reason. Because of this, the only one end of the cable will plug in to the battery pack.

Be sure that the CDC is turned "OFF" before connecting the battery pack. Use the CDC's built-in-test (BIT) mode to verify that the two are properly connected that the CDC is receiving sufficient power.

The battery pack is supplied with a Velcro carrying case. Use the carrying case to secure the CDC and battery pack in a "belly-to-belly" configuration. The carrying case's two elastic bands hold the CDC and battery pack, then fold the ensemble and secure the Velcro fastener. Any excess length of power cable should be wedged between the units to avoid accidental disconnection which could occur if the power cable is left dangling.

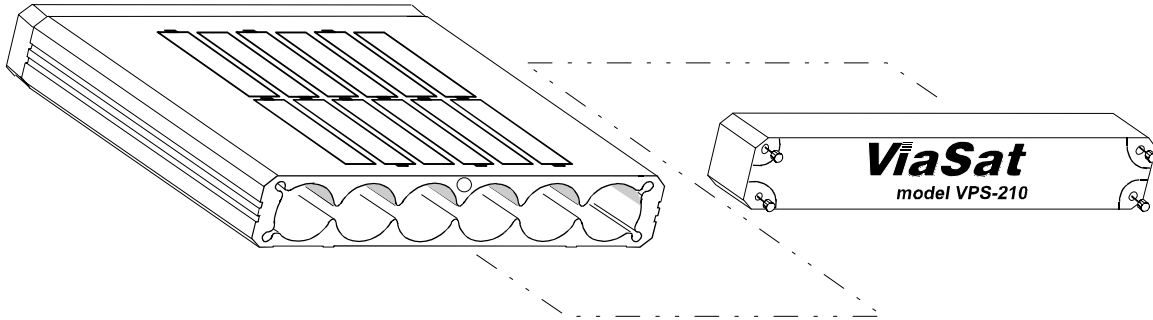
For convenience, use the carrying case's built-in pocket to store the power cable when not in use. Note: the case will also Velcro to the battery pack alone for storage.

#### Maintenance

Batteries should be replaced before they are completely depleted to prevent battery leakage and damage to the battery pack. A battery pack voltage of less than 12V indicates that the batteries should be replaced.

## Battery Replacement

To install new batteries or replace used batteries, remove the front panel by loosening the 4 captive screws. Replace all 12 batteries, at once. Load the new batteries “head-to-tail”, oriented as silk-screened on the top of the battery pack chassis. When re-installing the front cover, an alignment pin locates the proper orientation of the cover. Be sure to dispose of used batteries according to battery manufacturer's instructions.



**Battery Pack with Front Cover Removed**

## Specifications

Size	4.25" x .875" x 5.95"
Weight	1.1 lbs (w/o batteries) 1.75 lbs (with batteries)
Output	18Vdc

The table below lists expected battery pack performance with various off-the-shelf battery types. Actual battery life in your application will depend on many factors, including: which batteries you use, ambient temperature, CDC active/standby duty cycle, shelf time, etc.

*Mixing battery types is not recommended.*

Battery Type	Cell Voltage	Cell Capacity	Nominal Battery Life
NiCad	1.2V	600 mAh	2 to 3 hours
Alkaline	1.5V	2100 mAh	6 to 10 hours
Lithium	1.5V *	2250 mAh	7 to 11 hours

\* Battery pack voltage (which equals 12 times the cell voltage) must not exceed 32V or damage to the CDC may occur. Therefore, 3.0V lithium batteries should not be used.