PB-2500J Series

Industrial-grade Intelligent Supercapacitor-based Uninterruptible Power Backup Module



Key Features

- · Supercapacitor-based, -25 to 65°C wide temperature operation
- · 2500 watt-second energy capacity
- · Up to 10 years lifespan and 500,000 charging/ discharging cycles
- · Patented CAP energy management technology*
- Maximizes back-up time in an event of unforeseen power outage
- Monitors energy consumed and estimates the time required for system shutdown
- · User-configurable operating parameters
 - Auto/ manual shutdown control
 - High/ low voltage protection
 - UltraCAP energy/ lifespan configuration

*R.O.C Patent No. 1598820

Introduction

Neousys' PB-2500J series is an innovative power backup solution for demanding industrial applications. Utilizing supercapacitor technology, it features -25°C to 65°C operating temperature range and extremely high durability. Compared to traditional battery-based UPS systems, PB-2500J series can sustain superb reliability in extreme temperature environments and eliminates the drawback of battery performance degradation over time.

PB-2500J series is composed of eight 100F supercapacitors to provide 2500 watt-second stored energy to sustain your computer during power outage and depending on your system's power consumption, it could be from seconds to minutes. But what makes PB-2500J novel is its patented CAP energy management technology, an on-board processor that constantly monitors power consumption and evolves with the system. During a power outage, it maximizes the system operation time by estimating the perfect time to initiate system shutdown to prevent data loss.

When it comes to industrial embedded controllers, stability and data loss prevention during power outages are just as important. Neousys' PB-2500J series aims to redefine reliability and take it to another level. With PB-2500J series, unexpected power loss and unstable power lines are a thing in the past!

Specifications

	PB-2500J-PCIe	PB-2500J-CSM
Supercapacitor configuration	8x 100F, 3.0V ultracapacitors	
Capacity	2500 watt-second	
Expected lifespan	>10 years @ 25°C with 2500 w-s capacity* 76,000 hours @ 35°C with 2500 w-s capacity* 34,000 hours @ 45°C with 2500 w-s capacity* 15,000 hours @ 55°C with 2500 w-s capacity* 7,200 hours @ 65°C with 2500 w-s capacity* Expected lifespan is 2.2x when configured as 2100 watt-second energy capacity, or 4.8x when configured as 1750 watt-second energy capacity.	
Lifecycle	500,000 charging/ discharging cycles*	
Communication interface	3-wire RS-232	
Dimension	Half-length PCIe card 167 mm (W) x 111 mm (H)	-
Operating Temperature	-25°C ~ 65°C	
Storage Temperature	-40 °C~ 70°C	
EMC	CE/FCC Class A, according to EN 55022 & EN 55024	

Ordering Information

Model No.	Product Description	
PB-2500J-PCIe	Intelligent supercapacitor-based power backup PCIe card with 2500 w-s energy capacity	
PB-2500J-CSM5/ CSM7/ CSM9 Intelligent supercapacitor-based power backup Cassette module with 2500 w-s energy capacity, 9000 series		

^{*}Note: NOT compatible with Nuvo-6108GC, Nuvo-6108GC-IGN and Nuvo-8208GC