

PB-9250J-SA Series

9250 w.s Standalone Intelligent Supercapacitor-based Uninterruptible Power Back-up Module

Key Features

- Universal industrial-grade standalone SuperCaps UPS power backup module, compatible with all box-PCs
- Supercapacitor-based, -25°C to 65°C wide temperature operation
- 9250/ 4600 watt-second energy capacity
- Maximum 180W output power for the connected back-end system
- Over 10 years lifespan, and 500,000 charging/ discharging cycles
- Patented CAP energy management technology*
- Versatile operating mode
 - Normal backup mode
 - Ignition control mode for standard box-PC and in-vehicle controller
 - Daisy Chain Mode (PB-9250J-SA Only)
- EN50155 certificate



*R.O.C Patent No. 1598820

Introduction

PB-9250J-SA and PB-4600J-SA are standalone power backup modules that can protect your box-PC against power outages. Utilizing state-of-the-art supercapacitor technology, it can operate in harsh environments from -25 to 65°C, and have extremely high durability of over 10 years.

PB-9250J/ 4600J are composed of eight/ four 370F/ 3.0V supercapacitors respectively, and offer much longer lifespan than its 2.7V counterpart. It stores 9250/ 4600 watt-second energy to offer extra extended operation time to backup your system. Thanks to Neosys' patented CAP energy management technology, it can reliably supply up to 180W power to the back-end system and automatically manage boot and shutdown without installing additional drivers/ software. In addition to UPS-like power backup mode, it also offers two advanced ignition control modes for working with either standard box-PC or in-vehicle controller to provide stable power supply and execute user-configurable power-on/ power-off delay according to IGN signal input.

Featuring various modes, automatic shutdown control and up to 180W output power, Neosys standalone power backup modules can work with most off-the-shelf box-PCs. And with properties such as maintenance-free energy storage and uninterruptible power supply, they can prevent data loss for the connected back-end system during power outages in harsh industrial environments!



Specifications

	PB-9250J-SA	PB-4600J-SA
Supercapacitor Configuration		
Composition	8x 370F, 3.0V supercapacitors	4x 370F, 3.0V supercapacitors
Capacity	9250 watt-second	4600 watt-second
Expected lifespan	>10 years *	
Lifecycle	500,000 charging/ discharging cycles*	
Power Specification		
Input Voltage	12-35 VDC	
Input Connector	1x 3-pin pluggable terminal block (V+, GND, IGN_IN)	
Output Voltage	Charge mode: DC_IN bypass (DC_OUT = DC_IN) Discharge mode: 12 or 24V software-configurable	
Output Power	Maximum 180W output**	Maximum 100W output**
Output Connector	1x 3-pin pluggable terminal block (V+, GND, IGN_OUT)	
I/O Interface		
COM Port	1x DB9 for 3-wire RS-232	
Iso. DIO	1x 10-pin pluggable terminal block for - PWR_BTN# output - SYS_STAT input	

	PB-9250J-SA	PB-4600J-SA
Mechanical		
Dimension	82.5mm(W) x 175.2mm(H) x 128.2mm(D)	
Weight	1.7 kg	1.68kg
Mounting	DIN-rail and wall-mount	
Environmental		
Operating Temperature	-25°C ~ 65°C -40°C ~ 85°C with reduced energy capacity	
Storage Temperature	-40°C ~ 85°C	
Vibration	IEC61373:2010, Category 1, Class B Body mounted (part of EN50155)	
Shock	IEC61373:2010, Category 1, Class B Body mounted (part of EN50155)	
EMC	EN50155:2007, CE/ FCC Class A, according to EN 55032, EN 55035	

* To achieve > 10 years lifespan under 24/7 at 65°C operation, please charge PB-9250J-SA to 6525J energy level using the 4.8x SuperCAP Lifetime Extension setting (please refer to the user manual for details). Once the rated lifetime or cycle life has been reached, the capacity of supercapacitor may decrease up to 30% and ESR may increase up to 100% from initial values.

** Backup time for uninterruptible operation may be reduced when sustaining a back-end system with high power consumption.

Ordering Information

Model No.	Product Description
PB-9250J-SA	Standalone intelligent supercapacitor-base power backup module with 9250 W-s energy capacity
PB-4600J-SA	Standalone intelligent supercapacitor-base power backup module with 4600 W-s energy capacity