

PB-9250J-SA/ PB-4600J-SA

Industrial-grade Standalone Intelligent Supercapacitor-based Uninterruptible Power Backup Module



Key Features

- Universal standalone power backup module compatible with all box-PCs
- Supercapacitor-based, -25 to 65°C wide temperature operation
- 9250 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*
- Extending back-up time in the event of an unforeseen power outage
- Monitoring energy and power consumption to extend operation time for safe system shutdown
- Versatile operating mode
 - Normal backup mode
- Ignition control mode for standard box-PC and in-vehicle controller
- EN50155 certificate

*R.O.C Patent No. I598820

Introduction

PB-9250J-SA is a standalone power backup module 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 lasting over 10 years.

PB-9250J-SA is composed of eight 370F/ 3.0V supercapacitors, which offers much longer lifespan than its 2.7V counterpart, and stores 9250 watt-second energy to offer extra extended operation time to backup your system. Thanks to Neousys' patented CAP energy management technology, It can reliably supply 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 in-vehicle usage. PB-9250J-SA can work 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, PB-9250J-SA can work with most off-the-shelf box-PCs. And with properties such as maintenance-free energy storage and uninterrupted power supply, PB-9250J-SA can prevent the connected back-end system from data loss during power outage in harsh industrial environments!



Specifications

PB-9250J-SA	PB-4600J-SA	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				
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				
Isolated DIO	1x 10-pin pluggable terminal block for - PWR_BTN# output - SYS_STAT input				
Mechanical					
Dimension	82.5mm(W) x 175.2mm(H) x 128.2mm(D)				
Weight	1.7 kg	1.68kg			
Mounting	DIN-rail mount (standard) or Wall-mount (optional)				
Environmental					
Operating Temperature	-25°C ~ 65°C -40°C ~ 85°C with reduced energy capacity				
Storage Temperature	-40°C ~ 85°C				
Vibration	Compliant with IEC61373:2010, Category 1, Class B Body mounted (part of EN50155)				
Shock	Compliant with IEC61373:2010, Category 1, Class B Body mounted (part of EN50155)				
EMC	Compliant with 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 from the initial value to the full value.
** Backup time for uninterrupted 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

Optional Accessories

Wmkit-V-PB9250J	Wall-mount assembly for PB-9250J-SA Series, vertical type
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