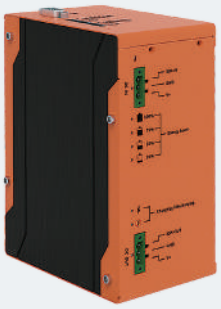
PB-9250J-SA/ PB-4600J-SA/ PB-2580J-SA

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**
- **Up to 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

The PB series 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°C to 65°C and have extremely high durability lasting over 10 years.

PB-9250J-SA and PB-4600J-SA are composed of eight and four 370F/ 3.0V supercapacitors, respectively, while PB-2580J-SA is composed of eight 100F/ 2.7V supercapacitors. They each offer 9250, 4600 and 2580 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 up to 180W of power to the back-end system and automatically manage boot and shutdown without installing additional drivers/ software. In addition to the 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 a 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, Neousys PB series can work with most off-the-shelf box-PCs. And with properties such as maintenance-free energy storage and uninterruptible power supply, the PB series can prevent the connected back-end system from data loss during a power outage in harsh industrial environments!

Specifications

	PB-9250J-SA	PB-4600J-SA	PB-2580J-SA
Supercapacitor Configuration			
Composition	8x 370F, 3.0V supercapacitors	4x 370F, 3.0V supercapacitors	8x 100F, 2.7V supercapacitors
Capacity	9250 watt-second	4600 watt-second	2580 watt-second
Expected lifespan	>10 years *		
Lifecycle	500,000 charging/ discharging cycles*		
Power Specification			
Input Voltage	12 to 35V DC input		
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**	Maximum 70W 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		

	PB-9250J-SA	PB-4600J-SA	PB-2580J-SA
Mechanical			
Dimension	82.5mm(W) x 175.2mm(H) x 128.2mm(D)		32.8mm(W) x 176.6mm(H) x 126mm(D)
Weight	1.7 kg	1.68 kg	0.93 kg
Mounting	DIN-rail mount (standard) or Wall-mount (optional)		
Environmental			
Operating Temp.	-25°C ~ 65°C -40°C ~ 85°C with reduced energy capacity		
Storage Temp.	-40°C ~ 85°C		
Vibration	Compliant with IEC61373:2010, Category 1, Class B Body mounted (part of EN50155)		Operating, MIL-STD-810G, Method 514.6, Category 4
Shock	Compliant with IEC61373:2010, Category 1, Class B Body mounted (part of EN50155)		Operating, MIL-STD-810G, Method 516.6, Procedure I, Table 516.6-II
EMC	Compliant with EN50155:2007, CE/FCC Class A, according to EN 55032 & EN 55035		CE/FCC Class A, according to EN 55032 & EN 55024

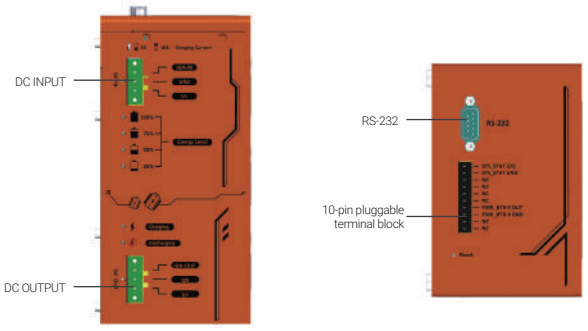
** To achieve > 10 years lifespan under 24/7 at 65°C operation, please charge PB-9250J-SA to 6525J energy level using the 4.8x SuperCAP Lifetime Extension setting (please refer to the user manual for details). Once the rated lifetime or cycle life has been reached, the capacity of supercapacitor may 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. Please consult with Neousys Technology if your computer accepts only constant-voltage input.*

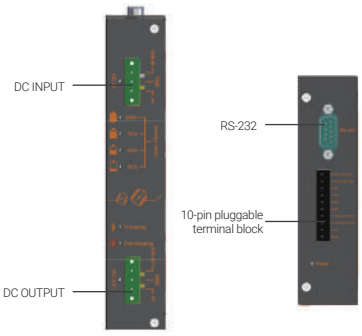
**** To ensure PB-9250J and PB-4600J's power backup operation functions as intended, please contact Neousys Technology technical support if your connecting back-end system accepts only constant voltage input.*

Appearance

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



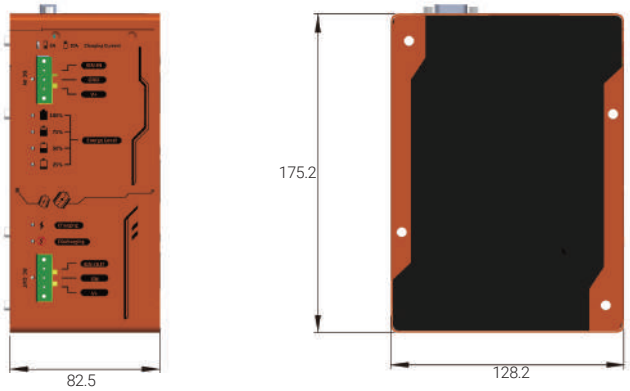
PB-2580J-SA



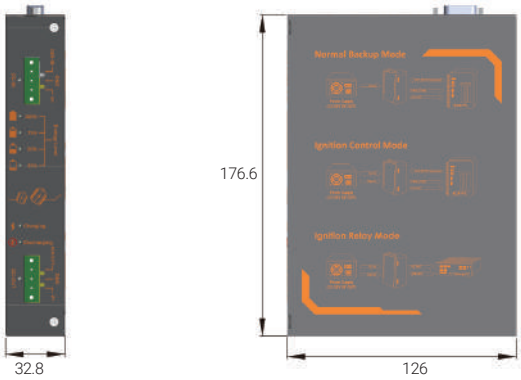
Dimensions

Unit : mm

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



PB-2580J-SA



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
PB-2580J-SA	Standalone intelligent supercapacitor-base power backup module with 2580 W•s energy capacity

Optional Accessories

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