

# SANUPS N11B-Li

OUTDOOR UPS

200V  
Model



SANYODENKI

# Passive Standby UPS

# SANUPS N11B-Li

## UPS with Lithium-ion Batteries for Outdoor Installation

**IP65**

### Lineup

[No. of phases/wires] Input/Output voltage	Output capacity		Battery backup time* Standard	Input/output
	[kVA]	[kW]		
[Single-phase 2-wire] 200 V model 200/220/230/240 V	1	1	150 min	Terminal block

Note: For the load conditions used in calculating backup times, refer to the specifications table.



### 1 Wide Operating Temperature Range

- The N11B-Li achieves an operating temperature range as wide as -20 to +50°C.

### 2 Reduced Maintenance Work

- Our conventional UPSs\* using lead-acid batteries require battery replacement about every 5 years. Thanks to Li-ion batteries, this UPS doesn't require battery replacement for 10 years.\*\* Thus, the cost of battery replacement can be reduced.

\* Conventional UPS: A11K (with lead-acid batteries)

\*\* Assuming 30°C ambient temperature and 10 power outages per year

### 3 Easy Maintenance

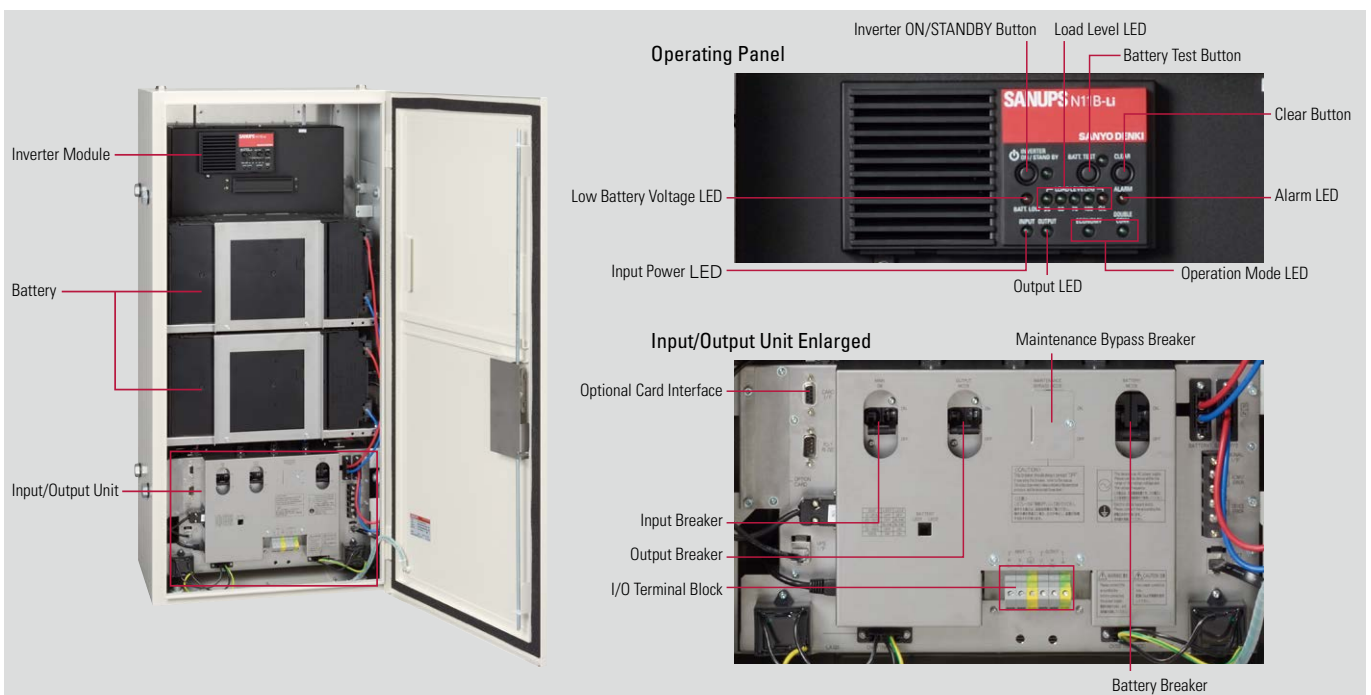
- The battery pack and inverter module are front-removable for easy maintenance.
- Its built-in maintenance bypass circuit allows maintenance to be performed while maintaining inverter power supply.

### Battery Cold Start Function

Batteries can start up the UPS even when grid AC power is not available, enabling inverter operation.

Note: When using this function, make sure to enable it with settings beforehand.

## Views and Part Names



Note: The photos above and actual products may differ in printed text parts and others.

## Specifications

Item	Set order no.	S-N11BL102A0150T65-2	
Rated output capacity (apparent power / active power)		1.0 kVA / 1.0 kW	
Technology	Topology	Passive standby	
	Cooling method	Forced air cooling	
	Inverter	High-frequency PWM (During battery operation)	
AC input	No. of phases/wires	Single-phase 2-wire <sup>(1)</sup>	
	Rated voltage	200/220/230/240 V <sup>(2)</sup> (Factory setting: 200 V)	
	Voltage range	Within ±10% of rated voltage	
	Rated frequency	50/60 Hz (auto-sensing)	
	Frequency range	Within ±1, 3, or 5% of rated frequency <sup>(2)</sup>	
	Required capacity <sup>(3)</sup>	1.7 kVA	
	AC output	No. of phases/wires	Single-phase 2-wire
Rated voltage		200/220/230/240 V <sup>(4)</sup>	
Rated current		5 A	
Transfer time		10 ms or less	
Voltage regulation		During grid operation	Same as input voltage range
		During battery operation	Within ±10% of rated voltage (at rated output)
Rated frequency		50/60 Hz (Same as the input rated frequency)	
Frequency regulation		During grid operation	Same as input frequency range
		During battery operation	Within ±0.5% of rated frequency (at rated output)
Output waveform		During grid operation	Same as input
		During battery operation	Pure sine wave
Voltage harmonic distortion		At linear load	3% or less (During battery operation at rated output)
		At rectifier load	7% or less (During battery operation at rated output)
Load power factor		Rated	1.0 (Variation range: 0.7 lagging to 1.0)
Transient voltage fluctuation		For abrupt load change	Within ±10% of rated voltage (During battery operation, for 0↔100% load step changes)
		For loss or return of input power	Within ±10% of rated voltage (During battery operation at rated output)
Overcurrent protection			Output breaker trip
Overload capability	During grid operation	200% (for 30 s), 800% (for 2 cycles)	
	During battery operation	105% (for 200 ms)	
Battery	Type	Lithium-ion battery	
	Standard backup time <sup>(5)</sup>	150 min	
	Battery self-test	Settings possible (Factory setting: "disabled")	
	Discharge capacity ratio (after 10 years)	Approx. 85% (assuming 25°C ambient temperature and 10 outages a year)	
Interface	Communication signal terminal	Failure/Outage	
	Network support	Optional LAN interface card is required	
Acoustic noise		40 dB or less	
Conversion efficiency		94%	
Heat dissipation (at rated output after fully charged)		67 W	
Input leakage current		3.5 mA or less	
Protection rating		IP65	
Operating environment <sup>(6)</sup>		Temperature: -20 to +50°C; humidity: 10 to 90% RH (non-condensing)	
Storage environment <sup>(7)</sup>		Temperature: -20 to +55°C; humidity: 10 to 90% RH (non-condensing)	
EMC standard		VCCI 32-1 Class A	

(1) If single-wire grounding the AC input and output, set the input/output ground phase to the UPS specification.

(2) Changeable with settings

(3) Maximum capacity during battery recovery charging

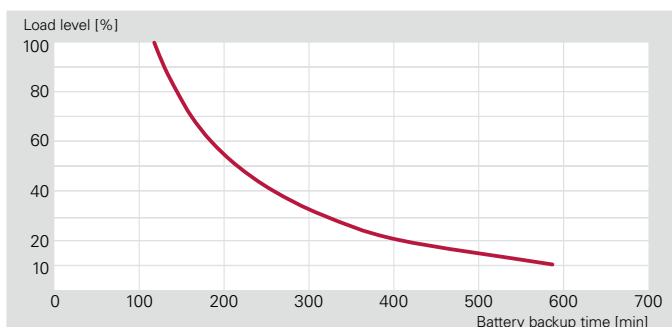
(4) Same as AC input

(5) At 25°C ambient temperature and load power factor of 0.7, using new, fully charged batteries.

(6) Battery charging will stop when battery temperature exceeds 55°C.

(7) To extend battery life, avoid use or storage for extended periods of time in environments exceeding +30°C. If the UPS is stored without being operated for a long period, the batteries may require recharging once a year.

## Load Level vs Backup Time



Note: Reference value at 25°C ambient temperature and load power factor of 1.0, using new, fully charged batteries.

## Network Options

### LAN interface card

When equipped in our UPSs, this card enables 24/7 monitoring of UPS operations and status, and sends e-mail notifications to system administrators for quick actions via network in the event of a power failure.



### SANUPS SOFTWARE

SANUPS SOFTWARE enables real-time monitoring of UPS status via Web, and alerts the customer/administrator when a problem is detected. Various settings can be done. Multiple computers can be monitored.

Note: Optional LAN interface card is required.



Item	Model	Remarks
LAN interface card	IPv6 model	<b>PRLANIF011B</b> This card enables 24/7 monitoring of UPS operations and status, and e-mail notifications to system administrators via network in the event of a power failure.
	Environment monitoring, IPv6 model	<b>PRLANIF013B</b> Combined with our temperature sensor (PRLANSN001) and humidity sensor (PRLANSN002), this model enables monitoring of UPS ambient temperature and humidity.
SANUPS SOFTWARE	Windows version, IPv6 model	<b>PMS50□□00**</b> Installation-based power management software For updated OS support information, please refer to our website.
	Multi-OS version,* IPv6 model	<b>PMS51□□00**</b> For bulk purchase of software licenses, append appropriate -suffix to the model number.
		-10 (10 licenses)
		-50 (50 licenses)
		-100 (100 licenses)

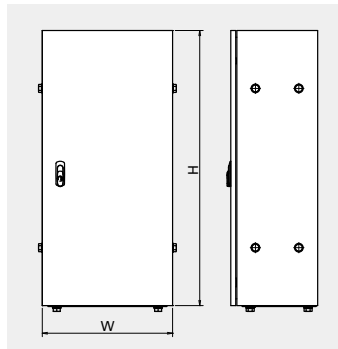
\* Supports Windows, Unix, and Linux.

\*\* The □'s denote revision characters.

Note: Optional products have different operating temperature ranges from the UPS.

## Specifications and Dimensions

Battery	Built-in
Battery capacity [Ah/cell]	1104
Battery power consumption [Wh]	2484
Input terminal block	Field wiring connection
Output terminal block	Field wiring connection
Dimensions (Unit: mm)	
Width	450
Height	950
Depth	300
Mass (with batteries)	90 kg



Paint color: Ivory (Munsell 6.6Y 8.3/0.8)

### ● Fire Service Law and Fire Prevention Ordinance in Japan

The Fire Prevention Ordinance regulates the total battery capacity of storage batteries, including lithium-ion batteries, that can be installed indoors. When installing UPSs indoors, confirm that the total battery capacity in one location does not exceed 4,800 Ah-cell. In other cases, consult with your local fire department for approval.

Note that the UPSs cannot be used as an emergency power supply for firefighting equipment.

### ● Building Standard Law in Japan

The UPSs cannot be used as backup power for building facilities conforming to the disaster management requirements defined in the Building Standard Law.

## Notes before Purchase

- Before installing, assembling, and using the products, please read Instruction Manual carefully and use them properly.
- When using the products in the following applications, consult with us in advance because special considerations are required for operation, maintenance, and management.
  - (a) Medical equipment that may have direct effects on human life or human body.
  - (b) Trains, elevators, and other machinery that can cause injury.
  - (c) Socially and publicly important computer systems.
  - (d) Other equipment that is related to safety of human life and that can have major impact on maintenance of public functions.
- For use in an environment where vibration is present, such as in a car or a ship, please consult with us in advance.
- Never attempt to disassemble or alter the products in any way.
- For installation and maintenance work of the products, please consult with us or properly licensed personnel.
- Please contact us concerning the disposal of used storage batteries supplied by SANYO DENKI.
- The products listed in this catalog fall into the category 16 of Appended Table 1 of the Export Trade Control Order. To export the products as an individual part or to export a device into which the products are assembled, the "Inform Requirements" and "Objective Requirements" that the Ministry of Economy, Trade and Industry of Japan established based on the "Catch-all Controls" must be studied for applicability. Accordingly, appropriate export formalities must be performed.
- SANYO DENKI will not be liable for any direct or indirect damages or loss, including but not limited to equipment downtime, missed power sales revenue, business interruptions, increased power purchases, resulting from the use of or inability to use our products or services.
- The products listed in this catalog are equipped with lithium-ion batteries. When transporting the products, do not transport by air. When transporting by sea, transport must be carried out according to the International Maritime Dangerous Goods (IMDG) Code. Also, depending on the country and region, there are cases where regulations are established independently, so please consult with the shipping company in advance.

For any inquiry or consultation, please contact a SANYO DENKI sales representative.

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<https://www.sanyodenki.com>

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CATALOG No.P1040B001 '19.1