

Passive Standby UPS

SANUPS N11B-Li

Outdoor UPS that can be used in projects for the Ministry of Land, Infrastructure, Transport and Tourism's "Fundamental Plan for National Resilience."

Lineup:

[No. of phases/wires] Input/Output voltage	Load conditions [W]	Battery backup time At -20°C ambient temperature
[Single-phase 2-wire] 100 V model 100/110/120 V	70	24 hours
	140	



Wide Operating Temperature Range

- Achieves a wide operating temperature range of -20 to +50°C. They can be used with confidence even in severe temperature environments.

Long-term Backup

- 70 or 140 W loads can be backed up for 24 hours at an ambient temperature of -20°C.

Long Life

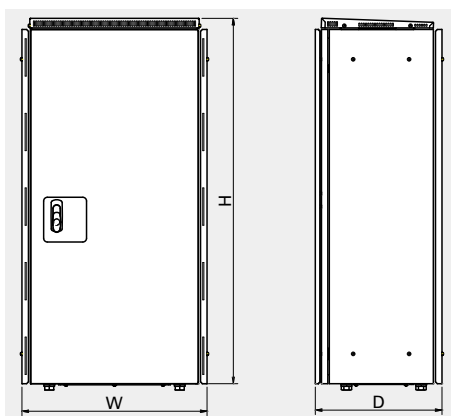
- Lithium-ion batteries (JIS C 8715-2) are used. This eliminates the need for battery replacement for 10 years,⁽¹⁾ reducing maintenance work and costs.

(1) At 25°C ambient temperature

Options

- With the optional LAN interface card, SNMP (Simple Network Management Protocol) can be used to add an IP monitoring connection.
- Please contact us for details such as heavy-duty anti-corrosion coating and setting the door key number.

Dimensions (Unit: mm)



Model no.	N11BL152AK11TST44HP	N11BL102AK31TST44HP
Width	498	498
Height	982	1338
Depth	341	541
Mass (with batteries)	112 kg	205 kg

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

Key number: TAK60

Specifications

Model no.	N11BL152AK11TST44HP		N11BL102AK31TST44HP	
Installation location	Outdoors			
Rated output capacity (apparent power / active power)	1.5 kVA / 1.2 kW		1 kVA / 0.8 kW	
Technology	Topology	Passive standby		
	Cooling method	Passive air cooling Forced air cooling during battery operation and high temperatures		
	Inverter	High-frequency PWM (During battery operation)		
AC input	No. of phases/wires	Single-phase 2-wire ⁽¹⁾		
	Rated voltage	100/110/120 V (Same as output voltage)		
	Voltage range	Within $\pm 10\%$ of rated voltage		
	Rated frequency	50/60 Hz (Auto-sensing)		
	Frequency range	Within $\pm 1, 3, 5,$ or 7% of rated frequency (Changeable with settings)		
	Required capacity ⁽²⁾	0.9 kVA (With a 70 W load)	0.65 kVA (With a 140 W load)	
	2.1 kVA (At rated load)	1.4 kVA (At rated load)		
AC output	No. of phases/wires	Single-phase 2-wire		
	Rated voltage	100/110/120 V (User-selectable. Factory setting: 100 V)		
	Rated current	15 A	10 A	
	Transfer time	10 ms or less		
	Voltage regulation	During grid operation	Within input voltage $\pm 3\%$	
		During battery operation	Within $\pm 2\%$ 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 $\pm 0.5\%$ of rated frequency (At rated output)	
	Output waveform	During grid operation	Same as input frequency range	
		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	0.8 lagging (Variation range: 0.7 lagging to 1.0)	
	Transient voltage fluctuation	For abrupt load change	Within $\pm 7\%$ of rated voltage (During battery operation, for 0 \leftrightarrow 100% load step changes)	
		For loss or return of input power	Within $\pm 5\%$ 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 (JIS C 8715-2)		
	Backup time ⁽³⁾	24 hours (With a 70 W load)	24 hours (With a 140 W load)	
	Battery self-test	Settings possible (Factory setting: "disabled")		
	Discharge capacity ratio (After 10 years)	Approx. 90% (Assuming 25°C ambient temperature and 10 outages a year)		
Interface	PC port	RS-232		
	Remote port	Remote ON/OFF switch		
	Alarm signal output terminal (Non-voltage contact)	Failure/Outage		
	Dry contact ⁽⁵⁾	Can be extended with optional dry contact interface card		
Network support ⁽⁵⁾	Optional LAN interface card is required			
Acoustic noise	43 dB or less	40 dB or less		
Heat dissipation (At rated output after fully charged)	48 W	40 W		
Input leakage current	3 mA or less			
Protection rating	IP44			
Operating environment	Temperature: -20 to +50°C ⁽⁴⁾ ; humidity: 10 to 90% RH (non-condensing)			
Storage environment ⁽⁶⁾	Temperature: -20 to +55°C; humidity: 10 to 90% RH (non-condensing)			
EMC standard	VCCI Class A			
Lighting surge protection	JIS C 5381-11 Class II			

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

(2) Maximum capacity during battery recovery charging

(3) At -20°C ambient temperature and rated output, using new, fully charged batteries

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

(5) LAN interface card and dry contact interface card cannot be used simultaneously.

(6) 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.