

SANUPS N11D-c

Standby UPS EDLC model

Ver. 1
English



SANUPS N11D-c

Slim Design with 200% Overload Capacity
With EDLC Equipped



Rack-mounted

UPS unit

3-year
warranty

200% Overload Capacity—Twice the Rated Capacity

- Delivers 200%⁽¹⁾ overload capacity, even during EDLC operation. Ideal for equipment with large power fluctuations, such as elevators, robots, and motor-driven machinery.

Ideal for Voltage Sag Protection

- Equipped with EDLCs for rapid charging, the UPS provides effective protection against utility power voltage sags.
- Designed to meet the voltage sag requirements specified in SEMI F47, the voltage sag immunity standard for semiconductor manufacturing equipment, supporting stable production line operation.

High Efficiency, Energy Efficient, and Low Noise

- Achieves power conversion efficiency of up to 98.6%,⁽²⁾ reducing power consumption and CO2 emissions while supporting the achievement of the SDGs. The product can reuse regenerative power,⁽³⁾ further enhancing energy efficiency.
- Low operating noise of approximately 30 dB⁽⁴⁾ supports installation in noise-sensitive environments.

(1) For 0.2 s

(2) In a 3 kVA configuration

(3) Regenerative power is generated when a rotating motor decelerates.

(4) In normal operation at rated load level

Flexible Product Lineup

- It can be easily mounted to EIA standard 19-inch racks. Rack mounting brackets and rack support rails are optional. Slim design supports wall mounting, enabling installation in control panels and other equipment.



Floor-standing type A



Wall-mounted



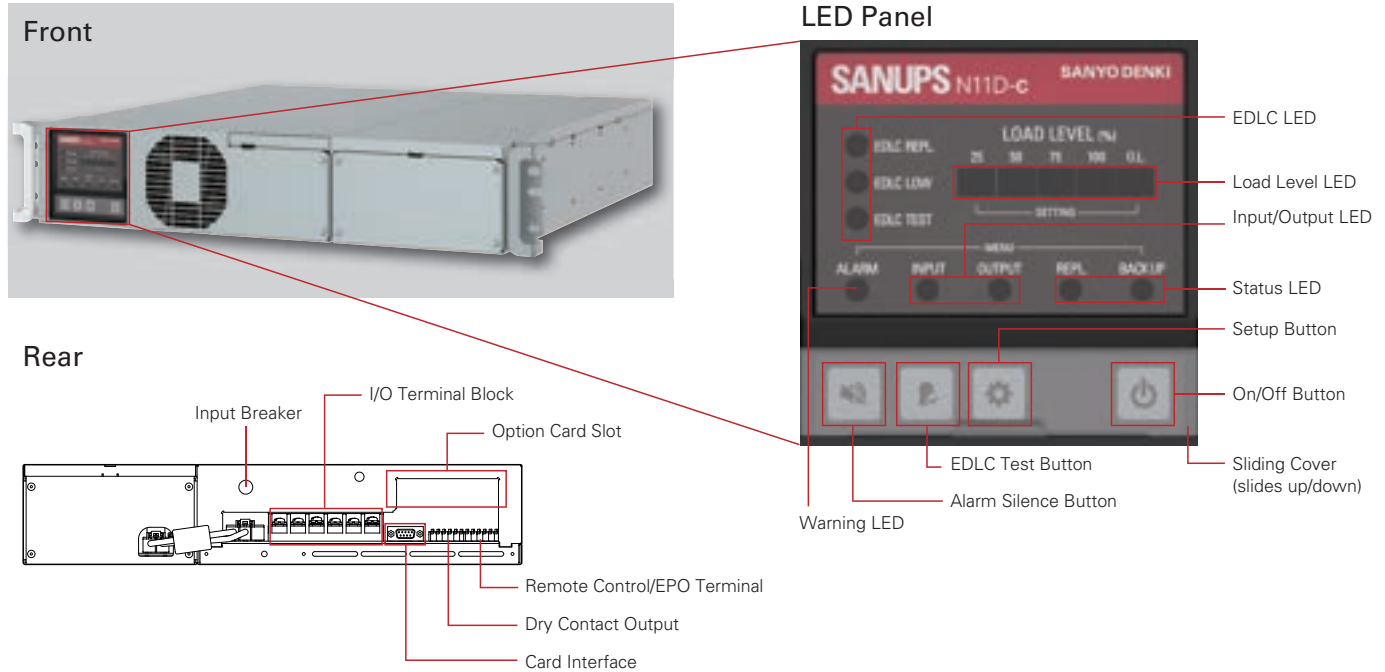
Floor-standing type B

Lineup

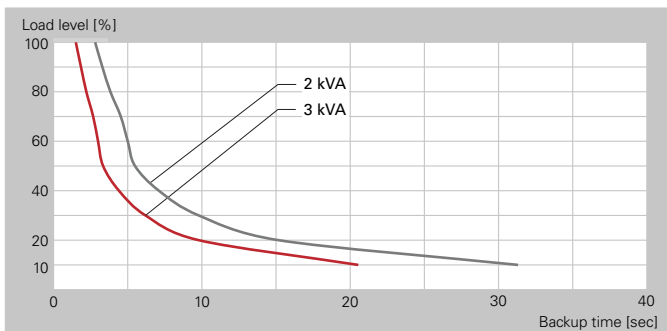
[No. of phases/wires] Input/Output voltage	Output capacity		EDLC Backup time	Installation	LED Panel	Order no.	Page	
	[kVA]	[kW]					Specifications	Dimensions
[Single-phase 2-wire] 200 V model 200/208/220/230 V	2	1.6	2.8 s	Rack-mounted	Front	S-N11DC202ARS	p. 4	p. 5
				Wall-mounted	Front	S-N11DC202AWT	p. 4	p. 5
				Floor-standing type A	Front	S-N11DC202AFT	p. 4	p. 6
				Floor-standing type B	Side	S-N11DC202AFS	p. 4	p. 6
	3	2.4	1.5 s	Rack-mounted	Front	S-N11DC302ARS	p. 4	p. 5
				Wall-mounted	Front	S-N11DC302AWT	p. 4	p. 5
				Floor-standing type A	Front	S-N11DC302AFT	p. 4	p. 6
				Floor-standing type B	Side	S-N11DC302AFS	p. 4	p. 6

Views and Part Names

Note: The illustration shows the rack-mounted configuration. Details may vary depending on the installation method.



Load Level vs Backup Time



Note: Reference value at 25°C ambient temperature and load power factor of 0.8, using new, fully charged EDLC.

Choose the optimal model to match your application and maintenance needs

Lead-acid battery model



Installation		
Wall-mounted		
Floor-standing type A		
Floor-standing type B		
Battery backup time		
Output capacity [kVA]	2	3
Backup time [min]	5, 9	5

Lithium-ion battery model



Installation		
Wall-mounted		
Floor-standing type A		
Floor-standing type B		
Battery backup time		
Output capacity [kVA]	2	3
Backup time [min]	9	8

Specifications

Model No.			S-N11DC202A□□		S-N11DC302A□□	
Rated output capacity (apparent power / active power)			2.0 kVA / 1.6 kW		3.0 kVA / 2.4 kW	
Technology		Topology		Standby		
		Cooling method		Forced air cooling		
		Inverter		High-frequency PWM		
AC input	No. of phases/wires		Single-phase 2-wire			
	Rated voltage		200/208/220/230 V (Same as output voltage)			
	Voltage range		Rated voltage: -15% to +10% / -8% to +8% (Factory setting: -15% to +10%)			
	Frequency		50/60 Hz (auto-detection)			
	Frequency range		±3/5/7% of rated frequency (Factory setting: 5%)			
	Required capacity ⁽¹⁾		3.0 kVA or less		4.0 kVA or less	
AC output	No. of phases/wires		Single-phase 2-wire			
	Rated voltage		200/208/220/230 V (Factory setting: 200 V)			
	Rated current		10 A		15 A	
	Transfer time		10 ms or less			
	Voltage regulation	In normal operation		Within +0 V / -4 V of input voltage		
		In EDLC operation		Within ±3% of rated voltage		
	Rated frequency		50/60 Hz (Same as input frequency)			
	Frequency regulation	In normal operation		Same as input		
		In EDLC operation		Within ±0.5% of rated frequency		
	Output waveform	During normal operation		Same as input		
		In EDLC operation		Sinusoidal		
	Voltage harmonic distortion	At linear load		5% or less (During EDLC operation at rated output)		
		At rectifier load		10% or less (During EDLC 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 ±10% of rated voltage (During EDLC operation, for 0⇔100% load step changes)		
	Overcurrent protection		Breaker trip			
	Overload capability	In normal operation		150% (for 60 s), 200% (for 30 s), 800% (for 2 cycles)		
		In EDLC operation (default setting)		150% (500 ms), 200% (200 ms)		
	Repeated voltage sag protection capability		Five consecutive 100% voltage sags of 0.5 s each at 10-second intervals (default setting)			
	Initial charge time		60 s max. (EDLC voltage: 0% to 100%)			
	Recharge time		10 s max. after providing rated compensation for a 1-second voltage sag			
	Maximum regenerative energy (EDLC operation)		2.4 kW			
EDLC	Type		Electric double-layer capacitor (EDLC)			
	Backup time ⁽²⁾		2.8 s		1.5 s	
	EDLC test		Selectable (Factory setting: every 180 days)			
	Expected life		Approximately 10 years (At a 30°C ambient temperature. For reference purposes only.)			
Interface	Dry contact input		EPO / Remote ON / Remote OFF			
	Dry contact output ⁽³⁾		System fault / AC output / low EDLC voltage (EDLC replacement warning) / AC input fault			
	Network support		Option LAN interface card is required			
Acoustic noise		In normal operation	40 dB or less			
		In EDLC operation	60 dB or less			
Heat dissipation (At rated operation, after EDLC charging completed)			41 W		61 W	
Input leakage current			3.5 mA or less			
Operating environment			Ambient temperature: 0 to +55°C, humidity: 20 to 90% RH (non-condensing)			
Storage environment ⁽⁵⁾			Ambient temperature: -15 to +60°C, humidity: 20 to 90% RH (non-condensing)			
Expected service life			10 years (At a 30°C average ambient temperature. For reference purposes only.)			
EMC standard			VCCI32-1 Class A			
Separate options						
Air filter kit ⁽⁴⁾			FL012			
Rack support rails ⁽⁵⁾			RM030			

(1) Max. capacity during capacitor recovery charging

(2) At 25°C ambient temperature and rated output, using new, fully charged batteries

(3) Form C dry-contact relay output.

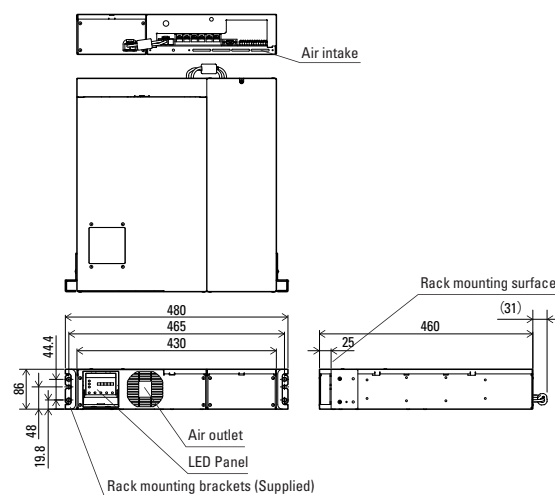
(4) Filter installed over the UPS unit air intake to help prevent dust ingress

(5) Used for mounting the UPS in a standard 19-inch equipment rack. Prior to purchase, check that the rails are mountable to your 19-inch rack.

Dimensions [Unit: mm]

Rack-mounted

Order no. (A set of a UPS unit and EDLC unit(s))	S-N11DC202ARS	S-N11DC302ARS
Rated output capacity (apparent power / active power)	2.0 kVA / 1.6 kW	3.0 kVA / 2.4 kW
Backup time	2.8 s	1.5 s
Mass	16 kg	



Installation clearance:

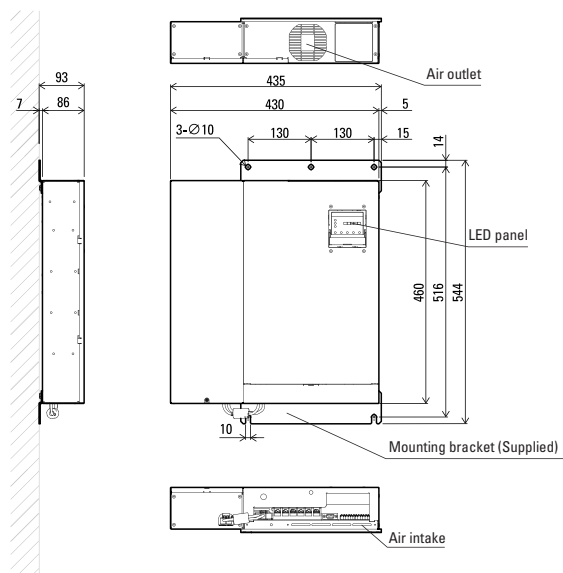
Front: 10 cm min.; Rear: 10 cm min.

Maintenance clearance:

Front: 1 m min.; Top: 50 cm min.; Rear: 50 cm min.

Wall-mounted

Order no. (A set of a UPS unit and EDLC unit(s))	S-N11DC202AWT	S-N11DC302AWT
Rated output capacity (apparent power / active power)	2.0 kVA / 1.6 kW	3.0 kVA / 2.4 kW
Backup time	2.8 s	1.5 s
Mass	16 kg	



Installation clearance:

Top: 10 cm min.; Bottom: 10 cm min.

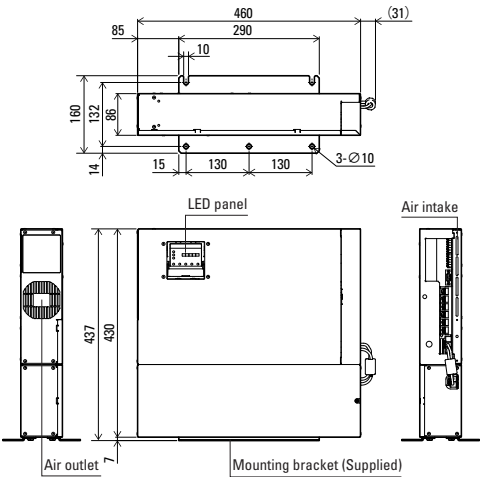
Maintenance clearance:

Front: 1 m min.; Top: 50 cm min.; Bottom: 50 cm min.

Dimensions [Unit: mm]

Floor-standing type A

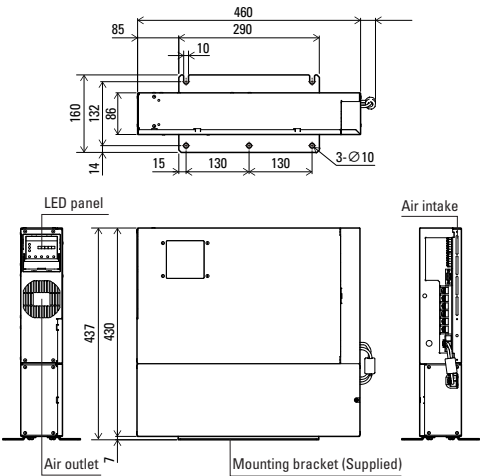
Order no. (A set of a UPS unit and EDLC unit(s))	S-N11DC202AFT	S-N11DC302AFT
Rated output capacity (apparent power / active power)	2.0 kVA / 1.6 kW	3.0 kVA / 2.4 kW
Backup time	2.8 s	1.5 s
Mass	16 kg	



Installation clearance:
Left side: 10 cm min.; Right side: 10 cm min.
Maintenance clearance:
Front: 1 m min.; Left side: 50 cm min.; Right side: 50 cm min.

Floor-standing type B

Order no. (A set of a UPS unit and EDLC unit(s))	S-N11DC202AFS	S-N11DC302AFS
Rated output capacity (apparent power / active power)	2.0 kVA / 1.6 kW	3.0 kVA / 2.4 kW
Backup time	2.8 s	1.5 s
Mass	16 kg	



Installation clearance:
Front: 10 cm min.; Rear: 10 cm min.
Maintenance clearance:
Front: 50 cm min.; Right side: 1 m min.; Rear: 50 cm min.

Material: Uncoated ZAM steel sheet

Network Options

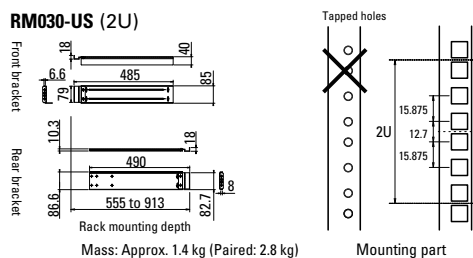
Item	Model no.	Description
LAN interface card	PRLANIF031	When installed in the option card slot of a UPS, this card enables 24/7 monitoring of UPS operations and status, and sends email notifications to system administrators for quick actions via network in the event of a power failure. Combined with a temperature and humidity sensor (Model no.: 9CT1-T, extension cable: CARD-CBL007), this card can also monitor the ambient temperature and humidity. Multiple servers (up to 50) can be shut down through communication protocols such as SSH, Telnet, and REST API.

Dimensions of Options [Unit: mm]

Rack support rails

Used for mounting the UPS in an EIA standard 19-inch rack.

(A pair of left and right rails. Shown below is the left rail.) They are not compatible with racks with tapped holes.



Rack mounting brackets for securing a UPS in a rack come included with or installed to the UPS.