SANYO DENKI

SANUPS A11N

Online UPS

Ver. 3.1
English



SANUPS A11N

Suitable for servers, base stations, and factory facilities



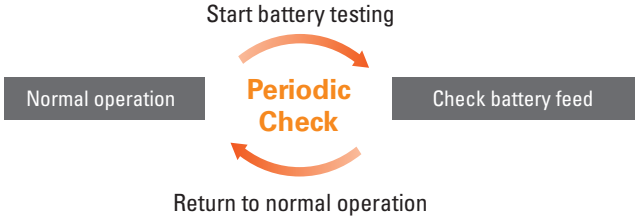
UPS unit
3-year warranty

High Efficiency

- This UPS achieves a conversion efficiency of 94% (up to 95.1%).(1)

High Reliability

- Output capacity can be expanded to up to 20 kVA by combining up to four 5 kVA units. The parallel redundant operation(2) allows one unit to be used as a spare unit, delivering a highly reliable and stable power supply to loads.
- The UPS performs battery self-tests automatically at regular intervals, preventing malfunction due to battery run-out in the event of a power failure. Battery testing requires no power interruption to loads.



Note: Battery test interval can be set by the user.

Space-Saving

- The compact 3U-sized(1) UPS unit is suitable for standard EIA/JIS 19-inch racks.

Easy Maintenance

- Models with built-in maintenance bypass circuit can continue to supply grid power during maintenance. During parallel redundant operation,(2) in particular, inverter power can be continued while replacing UPS units even if an outage occurs during maintenance.

Note: The maintenance bypass circuit is not available for UL/CE certified models.

For Use as an Emergency Battery

- This UPS features battery cold start function(3) that enables the UPS unit to start up on and power loads from battery even without grid AC power.

Compatible with High Power Factor Loads

- With a 0.9 load power factor, the UPS is capable of providing its power to loads with a high power factor such as servers.

Output capacity of 5 kVA → 4.5 kW max.

Output capacity of 20 kVA → 18 kW max.

(1) For a single unit of a 5-minute backup model with 5 kVA output capacity.
(2) Parallel redundant operation is an operation in which the UPS output capacity has a sufficient margin for the load. The S-A11N103A005T can perform the redundant operation for a 5 kVA load.
(3) This function is selectable at the time of order. Note that it is not available with UL/CE certified models.

Scalable capacity



Parallel operation (N configuration)	5 kVA / 4.5 kW	10 kVA / 9 kW	15 kVA / 13.5 kW	20 kVA / 18 kW
Parallel redundant operation (N+1 configuration)	-	5 kVA / 4.5 kW	10 kVA / 9 kW	15 kVA / 13.5 kW

Installation examples



Mountable in an EIA standard 19-inch rack

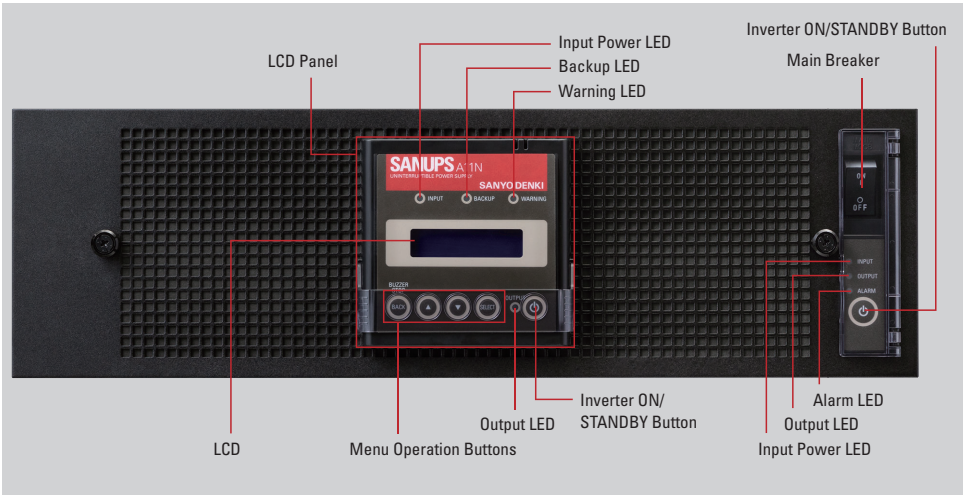
Rack support rails are optional.



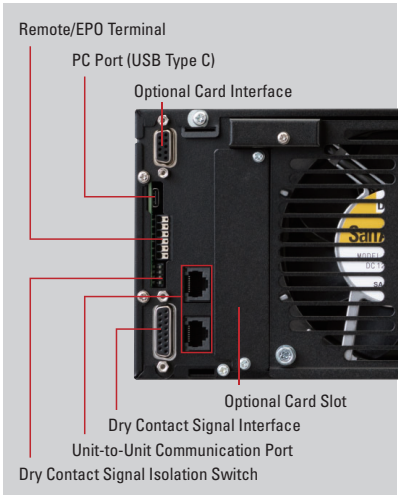
Vertical

You can change the orientation of the LCD panel.
Floor mounting brackets are included as standard for the single unit type (shown in the photo) and optional for types with a PDU.

Views and Part Names



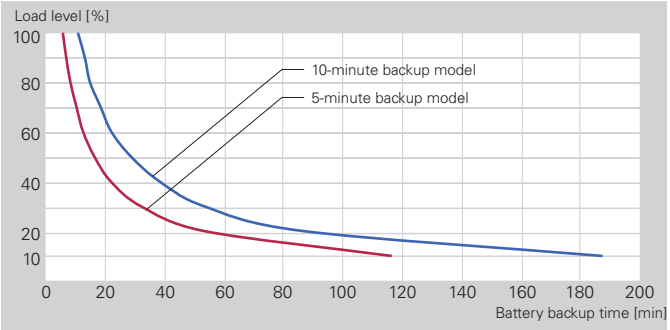
Front View - Operating Panel



Rear View - Communication Interface

Note: The photos (5-minute backup model shown above) may look different from the actual products in the printed text, etc.

Load Level vs Backup Time

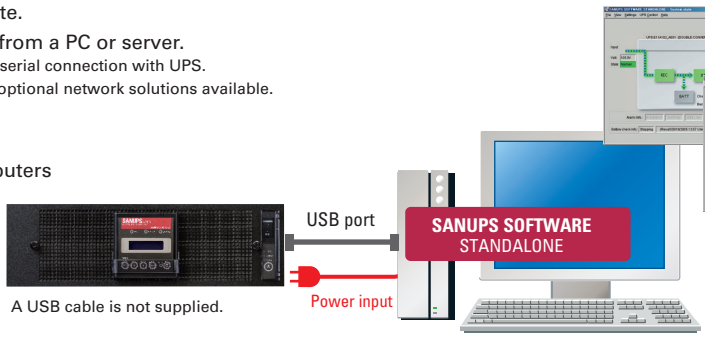


Note: At a 25°C ambient temperature and load power factor of 0.9 for a 5-minute backup model and 0.8 for a 10-minute backup model, using new, fully charged batteries.

SANUPS SOFTWARE STANDALONE

A free software program (Windows version) that enables the power management from computers is available for download from our website.
UPS status can be checked at a glance from a PC or server.
This software can only be used on computers in serial connection with UPS.
For power management via a network, we have optional network solutions available.

Main functions
- Automatic start-up/shutdown of computers
- Scheduled operation
- UPS status display
- Message display
- UPS event log



A USB cable is not supplied.

Operation screen examples

Online UPS **SANUPS A11N**

Lineup

Input and output connector types are indicated by the following icons: (T) Terminal block, (P) Plug, (C) Outlet

[No. of phases/wires] Input voltage	[No. of phases/wires] Output voltage	Output capacity [kVA]	Output capacity [kW]	Scalability (Max. 20 kVA)[1]	Input connector	Output connector	Safety Standards	Free-standing	Rack mount	Battery backup time[2] (min)	Order no.[3]	Page: Specifications	Page: Dimensions
[Single-phase 2-wire] 200 V 200/208/220/230/240 V	[Single-phase 2-wire] 200 V 200/208/220/230/240 V	5	4.5	—	T	T, C	—	✓	✓	5	**S-A11N502A005T**	p. 6	p. 12
										10	**S-A11N502A010T**	p. 6	p. 13
									—	30	**S-A11N502A030T**	p. 6	p. 20
										60	**S-A11N502A060T**	p. 6	p. 20
										180	**S-A11N502A180T**	p. 6	p. 20
									✓	15	**S-A11N502A015T**	p. 6	p. 23
										25	**S-A11N502A025T**	p. 6	p. 23
										35	**S-A11N502A035T**	p. 6	p. 23
										45	**S-A11N502A045T**	p. 6	p. 23
								—	✓	15	**S-A11N502A015TRM**	p. 6	p. 24
										25	**S-A11N502A025TRM**	p. 6	p. 24
										35	**S-A11N502A035TRM**	p. 6	p. 24
										45	**S-A11N502A045TRM**	p. 6	p. 24
				—	P	C	—	✓	✓	5	**S-A11N502A005N**	p. 6	p. 12
										10	**S-A11N502A010N**	p. 6	p. 13
									—	30	**S-A11N502A030N**	p. 6	p. 20
										60	**S-A11N502A060N**	p. 6	p. 20
										180	**S-A11N502A180N**	p. 6	p. 20
									✓	15	**S-A11N502A015N**	p. 6	p. 23
										25	**S-A11N502A025N**	p. 6	p. 23
										35	**S-A11N502A035N**	p. 6	p. 23
										45	**S-A11N502A045N**	p. 6	p. 23
								—	✓	15	**S-A11N502A015NRM**	p. 6	p. 24
										25	**S-A11N502A025NRM**	p. 6	p. 24
										35	**S-A11N502A035NRM**	p. 6	p. 24
										45	**S-A11N502A045NRM**	p. 6	p. 24
				✓	T	T, C	—	✓	—	5	**S-A11N502A005S2**	p. 6	p. 14
										10	**S-A11N502A010S2**	p. 6	p. 15
										30	**S-A11N502A030S2**	p. 6	p. 20
										60	**S-A11N502A060S2**	p. 6	p. 20
										180	**S-A11N502A180S2**	p. 6	p. 20
								—	✓	5	**S-A11N502A005S2RM**	p. 6	p. 14
										10	**S-A11N502A010S2RM**	p. 6	p. 15
										15	**S-A11N502A015S2RM**	p. 6	p. 24
										25	**S-A11N502A025S2RM**	p. 6	p. 24
										35	**S-A11N502A035S2RM**	p. 6	p. 24
										45	**S-A11N502A045S2RM**	p. 6	p. 24
		10	9	—	T	T, C	—	✓	✓	5	**S-A11N103A005T**	p. 8	p. 12
									—	30	**S-A11N103A030T**	p. 8	p. 21
										60	**S-A11N103A060T**	p. 8	p. 21
										180	**S-A11N103A180T**	p. 8	p. 21
									✓	15	**S-A11N103A015T**	p. 8	p. 23
										25	**S-A11N103A025T**	p. 8	p. 23
										35	**S-A11N103A035T**	p. 8	p. 23
								—	✓	15	**S-A11N103A015TRM**	p. 8	p. 24
										25	**S-A11N103A025TRM**	p. 8	p. 24
										35	**S-A11N103A035TRM**	p. 8	p. 24
				✓	T	T, C	—	✓	—	5	**S-A11N103A005S2**	p. 8	p. 14
										10	**S-A11N103A010S2**	p. 8	p. 15
										30	**S-A11N103A030S2**	p. 8	p. 21
										60	**S-A11N103A060S2**	p. 8	p. 21
										180	**S-A11N103A180S2**	p. 8	p. 21
								—	✓	5	**S-A11N103A005S2RM**	p. 8	p. 14
										10	**S-A11N103A010S2RM**	p. 8	p. 15
										15	**S-A11N103A015S2RM**	p. 8	p. 24
										25	**S-A11N103A025S2RM**	p. 8	p. 24
										35	**S-A11N103A035S2RM**	p. 8	p. 24

(1) Up to four 5 kVA UPS units can be combined. The expansion can be done even after installation.
(2) At a 25°C ambient temperature and load power factor of 0.9 for a 5-minute backup model and 0.8 for a 10-minute backup model, using new, fully charged batteries.
(3) These are a set of a UPS unit(s) + battery(ies) + power distribution unit. The PDU is not included with some models.

Lineup

Input and output connector types are indicated by the following icons: (T) Terminal block, (P) Plug, (C) Outlet

[No. of phases/wires] Input voltage	[No. of phases/wires] Output voltage	Output capacity [kVA]	Output capacity [kW]	Scalability (Max. 20 kVA)[1]	Input connector	Output connector	Safety Standards	Free-standing	Rack mount	Battery backup time[2] (min)	Order no.[3]	Page: Specifications	Page: Dimensions
[Single-phase 2-wire] 200 V 200/208/220/230/240 V	[Single-phase 2-wire] 200 V 200/208/220/230/240 V	15	13.5	✓	T	T C	–	✓	–	5	S-A11N153A005S2	p. 10	p. 14
										10	S-A11N153A010S2	p. 10	p. 15
										30	S-A11N153A030S2	p. 10	p. 22
										60	S-A11N153A060S2	p. 10	p. 22
										180	S-A11N153A180S2	p. 10	p. 22
								–	✓	5	S-A11N153A005S2RM	p. 10	p. 14
										10	S-A11N153A010S2RM	p. 10	p. 15
										15	S-A11N153A015S2RM	p. 10	p. 25
		20	18	–	T	T C	–	✓	–	5	S-A11N203A005S2	p. 11	p. 14
										10	S-A11N203A010S2	p. 11	p. 15
										30	S-A11N203A030S2	p. 11	p. 22
										60	S-A11N203A060S2	p. 11	p. 22
										180	S-A11N203A180S2	p. 11	p. 22
								–	✓	5	S-A11N203A005S2RM	p. 11	p. 14
										10	S-A11N203A010S2RM	p. 11	p. 15
										15	S-A11N203A015S2RM	p. 11	p. 25
[Single-phase 2-wire] 100 V or [Single-phase 2-wire] 200 V	[Single-phase 2-wire] 100 V or [Single-phase 3-wire] 100/200 V	5	4.5	–	T	T	–	✓	–	5	S-A11N502A005W1	p. 7	p. 16
										10	S-A11N502A010W1	p. 7	p. 16
										30	S-A11N502A030W1	p. 7	p. 20
										60	S-A11N502A060W1	p. 7	p. 20
										180	S-A11N502A180W1	p. 7	p. 20
		10	9	–	T	T	–	✓	–	5	S-A11N103A005W1	p. 9	p. 16
										10	S-A11N103A010W1	p. 9	p. 16
										30	S-A11N103A030W1	p. 9	p. 21
										60	S-A11N103A060W1	p. 9	p. 21
										180	S-A11N103A180W1	p. 9	p. 21
[Single-phase 2-wire] 200 V	[Single-phase 2-wire] 100 V or [Single-phase 3-wire] 100/200 V	5	4.5	–	T	T	–	✓	–	5	S-A11N502A005W2	p. 7	p. 17
										10	S-A11N502A010W2	p. 7	p. 17
										30	S-A11N502A030W2	p. 7	p. 20
										60	S-A11N502A060W2	p. 7	p. 20
										180	S-A11N502A180W2	p. 7	p. 20
		10	9	–	T	T	–	✓	–	5	S-A11N103A005W2	p. 9	p. 17
										10	S-A11N103A010W2	p. 9	p. 17
										30	S-A11N103A030W2	p. 9	p. 21
										60	S-A11N103A060W2	p. 9	p. 21
										180	S-A11N103A180W2	p. 9	p. 21
		5	4.5	✓	T	T	–	✓	–	5	S-A11N502A005Z	p. 7	p. 18
										10	S-A11N502A010Z	p. 7	p. 19
										30	S-A11N502A030Z	p. 7	p. 20
										60	S-A11N502A060Z	p. 7	p. 20
										180	S-A11N502A180Z	p. 7	p. 20
		10	9	✓	T	T	–	✓	–	5	S-A11N103A005Z	p. 9	p. 18
										10	S-A11N103A010Z	p. 9	p. 19
										30	S-A11N103A030Z	p. 9	p. 21
										60	S-A11N103A060Z	p. 9	p. 21
										180	S-A11N103A180Z	p. 9	p. 21
		15	13.5	✓	T	T	–	✓	–	5	S-A11N153A005Z	p. 10	p. 18
										10	S-A11N153A010Z	p. 10	p. 19
										30	S-A11N153A030Z	p. 10	p. 22
										60	S-A11N153A060Z	p. 10	p. 22
										180	S-A11N153A180Z	p. 10	p. 22
		20	18	–	T	T	–	✓	–	5	S-A11N203A005Z	p. 11	p. 18
										10	S-A11N203A010Z	p. 11	p. 19
										30	S-A11N203A030Z	p. 11	p. 22
										60	S-A11N203A060Z	p. 11	p. 22
										180	S-A11N203A180Z	p. 11	p. 22
[Single-phase 2-wire] 200 V 200/208/220/230/240 V	[Single-phase 2-wire] 200 V 200/208/220/230/240 V	5	4.5	–	T	T	✓	✓	✓	5	A11N502U0TM	p. 28	p. 29
		10	9	–	T	T	✓	✓	✓	5	A11N103U0TM	p. 28	p. 29

(1) Up to four 5 kVA UPS units can be combined. The expansion can be done even after installation.
(2) At a 25°C ambient temperature and load power factor of 0.9 for a 5-minute backup model and 0.8 for a 10-minute backup model, using new, fully charged batteries.
(3) These are a set of a UPS unit(s) + battery(ies) + power distribution unit. The PDU is not included with some models.

Specifications

Output capacity 5 kVA

Order no.				S-A11N502A005T	S-A11N502A005N	S-A11N502A005S2△△(1)
		10-minute backup model (4U)		S-A11N502A010T	S-A11N502A010N	S-A11N502A010S2△△(1)
Rated output capacity (apparent power / active power)		Single-unit/Parallel operation (N config.)		5 kVA / 4.5 kW		
		Parallel redundant operation (N+1 config.)		—		
Technology		Topology		Double conversion online		
		Cooling system		Forced air cooling		
		Inverter		High-frequency PWM		
AC input	No. of phases/wires			Single-phase 2-wire		
	Rated voltage			200/208/220/230/240 V (Same as output voltage)		
	Voltage range(2)			Within -40 to +15% of rated voltage		
	Rated frequency			50/60 Hz (Auto-sensing or fixed-frequency mode selectable.(3) Factory setting: auto-sensing)		
	Required capacity		N config.	5.5 kVA or less		
			N+1 config.	—		
	Input power factor			0.95 or greater (at rated input voltage, input voltage harmonic distortion < 1%)		
AC output	No. of phases/wires			Single-phase 2-wire		
	Rated voltage			200/208/220/230/240 V (Selectable. Factory setting: 200 V)		
	Voltage regulation			Within ±2% of rated voltage		
	Rated frequency			50/60 Hz (Same as input frequency)		
	Frequency regulation(2)	In grid operation		Within ±1/3/5% of rated frequency (Selectable. Factory setting: ±3%)		
		At free run (asynchronous)		Within ±0.5% of rated frequency		
	Voltage waveform			Sinusoidal		
	Voltage harmonic distortion	At linear load		3% or less (At rated output)		
		At rectifier load		7% or less (At rated output)		
	Load power factor	Rated		0.9 lagging (Variation range: 0.7 lagging to 1.0)		
	Transient voltage fluctuation	For abrupt load change		Within ±5% of rated voltage (For 10⇔100% abrupt change)		
		For loss/return of input power		Within ±5% of rated voltage		
		For abrupt input voltage change		Within ±5% of rated voltage (For ±10% abrupt change)		
	Overcurrent protection		N config.	110% or more (Automatic transfer to bypass circuit(4) if exceeded)		
			N+1 config.	—		
	Overload capability	Inverter	N config.	110% (for 1 min), 118% (instantly)		
			N+1 config.	—		
		Bypass	N config.	200% (for 30 s), 800% (for 2 cycles)		
			N+1 config.	—		
Battery	Type			Small-sized valve-regulated lead-acid (VRLA) battery		
	Backup time			5 min (At 25°C ambient temperature and load power factor of 0.9, using new, fully charged batteries) or 10 min (At 25°C ambient temperature and load power factor of 0.8, using new, fully charged batteries)		
	Quantity			16 pcs (12 V per battery)		
	Total capacity			5-minute backup models: 1200 Wh, 10-minute backup models: 1632 Wh		
	Expected life			5 years (At a 25°C ambient temperature. For reference purposes only.)		
Acoustic noise (1 m from front of UPS, A-weighted)		Excluding start of charging		45 dB or less		
		At start of charging		51 dB or less		
Heat dissipation (at rated output after fully charged)				287 W		
Input leakage current				5 mA or less		22 mA or less
I/O connector, wire gauge, etc.(5)		Input connector		M6 terminal	NEMA L6-30P	M8 terminal
		Input wire		8 mm²	—	8 mm²
		Output connector		M6 terminal NEMA L6-30R ×1 IEC-C13 ×2	NEMA L6-30R ×2 NEMA L6-20R ×2	M8 terminal NEMA L6-30R ×4
		Output wire		8 mm²	—	8 mm²
		Grounding wire		5.5 mm²	—	8 mm²
		Input distribution board breaker capacity		40 A or more	40 A or more	40 A or more
Operating environment				Temperature: 0 to 40°C, humidity: 10 to 90% RH (non-condensing)		
Storage environment(6)				Temperature: -15 to +50°C, humidity: 10 to 90% RH (non-condensing)		
Expected service life (of the UPS unit excluding battery)				10 years (At a 30°C average ambient temperature. For reference purposes only.)		
EMC standard				Compliant with VCCI 32-1 Class A(7)		—
UPS classification according to IEC standard				VFI-SS-111		
Separate options						
Rack support rails(8)		5-minute backup		RM027-US (3U, 1 pair)		RM027-US (3U, 1 pair),RM028-US (4U, 1 pair)
		10-minute backup		RM028-US (4U, 1 pair)		RM028-US (4U, 2 pairs)
Casterbase (9)				CBA11NA00/CBA11NA01		—
Floor mounting brackets(10)				—		FMA11NA00 (1 pc)
Air filter kit(11)				FLA11NA00-3U (3U, 1 pc) or FLA11NA00-4U (4U, 1 pc)		
Replacement battery pack model no.				BPA11N006A00M (3U, 2 pcs) or BPA11N009A00M (4U, 2 pcs)		

(1) The rack mount models have model numbers ending in "**RM**" in place of wildcard characters.
(2) AC input voltage range changes depending on the load level. The input voltage range is within -40% to +15% of the rated value at load levels ≤ 70%, and is within -20% to +15% of the rated value at load levels > 70%. For S-A11N502A005N (NEMA plug type), the input voltage range is within -40% to +15% of the rated value at load levels ≤ 70%, and is within -10% to +15% of the rated value at load levels > 70%.
(3) At the auto-sensing setting, the frequency synchronizing range can be set to ±1, 3, or 5%. At the auto-sensing setting, the input frequency range is within ±8% of the rated frequency. Also, for the inverter to start running, the input frequency must be within the set synchronizing frequency range. When fixed-frequency setting is selected, output frequency is fixed to either 50 Hz or 60 Hz regardless of input frequency. At the fixed-frequency setting, the input frequency range is 40 to 120 Hz.
(4) Uninterrupted transfer to the bypass circuit is only possible when all of the following conditions are true: the frequency setting is set to automatic; input frequency is within the synchronizing range; input voltage is within the allowable range.
(5) Communications:
a. Dry contact signal: D-sub 15-pin female, with M3 fixing screws
b. PC port: USB Type C
c. Remote control: One-touch terminal block, compatible wire size: 24 to 16 AWG
(6) Avoid use or storage in 30°C or higher temperatures for extended periods of time, or the battery life will shorten. If a UPS is to be stored for a long period, it will be necessary to recharge batteries once every two to six months.
(7) 5-minute backup models (3U) only
(8) Used for mounting the UPS on an EIA standard 19-inch rack. Prior to purchase, check that the rails are mountable to your 19-inch rack.
(9) Used to move a UPS. Can be secured with floor-mounting brackets.
(10) Used to secure the UPS to the floor.
(11) Front side air intake filter to prevent dust ingress.

Note 1: Output power is supplied from the inverter at start-up. (Inverter start-up type)
Note 2: The Instruction Manuals included with these models are in Japanese.

Specifications

Output capacity 5 kVA

Order no.	5-minute backup model (3U)		**S-A11N502A005W1**	**S-A11N502A005W2**	**S-A11N502A005Z**	
	10-minute backup model (4U)		**S-A11N502A010W1**	**S-A11N502A010W2**	**S-A11N502A010Z**	
Rated output capacity (apparent power / active power)	Single-unit/Parallel operation (N config.)		5 kVA / 4.5 kW			
	Parallel redundant operation (N+1 config.)		—			
Technology	Topology		Double conversion online			
	Cooling system		Forced air cooling			
	Inverter		High-frequency PWM			
AC input	No. of phases/wires		Single-phase 2-wire			
	Rated voltage		100/200 V	200 V		
	Voltage range(1)		Within -35 to +15% of rated voltage	Within -40 to +15% of rated voltage		
	Rated frequency		50/60 Hz (Auto-sensing or fixed-frequency mode selectable.(2) Factory setting: auto-sensing)			
	Required capacity	N config.	6 kVA or less			
		N+1 config.	—			
	Input power factor		0.95 or greater (at rated input voltage, input voltage harmonic distortion < 1%)			
AC output	No. of phases/wires		Single-phase 2-wire or single-phase 3-wire			
	Rated voltage		100 V (2-wire) or 100/200 V (3-wire)			
	Voltage regulation		Within ±5% of rated voltage			
	Rated frequency		50/60 Hz (Same as input frequency)			
	Frequency regulation(2)	In grid operation	Within ±1/3/5% of rated frequency (Selectable. Factory setting: ±3%)			
		At free run (asynchronous)	Within ±0.5% of rated frequency			
	Voltage waveform		Sinusoidal			
	Voltage harmonic distortion	At linear load	3% or less (At rated output)			
		At rectifier load	—			
	Load power factor	Rated	0.9 lagging (Variation range: 0.7 lagging to 1.0)			
	Transient voltage fluctuation	For abrupt load change	Within ±5% of rated voltage (For 20⇔100% abrupt change)			
		For loss/return of input power	Within ±5% of rated voltage			
		For abrupt input voltage change	Within ±5% of rated voltage (For ±10% abrupt change)			
	Overcurrent protection	N config.	104% or more (Automatic transfer to bypass circuit(3) if exceeded)			
		N+1 config.	—			
	Overload capability	Inverter / N config.	104% (for 1 min), 112% (instantly)			
		Inverter / N+1 config.	—			
		Bypass / N config.	200% (for 30 s), 800% (for 2 cycles)			
		Bypass / N+1 config.	—			
Battery	Type		Small-sized valve-regulated lead-acid (VRLA) battery			
	Backup time		5 min (At 25°C ambient temperature and load power factor of 0.9, using new, fully charged batteries) or 10 min (At 25°C ambient temperature and load power factor of 0.8, using new, fully charged batteries)			
	Quantity		16 pcs (12 V per battery)			
	Total capacity		5-minute backup models: 1200 Wh, 10-minute backup models: 1632 Wh			
	Expected life		5 years (At a 25°C ambient temperature. For reference purposes only.)			
Acoustic noise (1 m from front of UPS, A-weighted)	Excluding start of charging		50 dB or less			
	At start of charging		55 dB or less			
Heat dissipation (at rated output after fully charged)			673 W	500 W		
Input leakage current			20 mA or less			
I/O connector, wire gauge, etc.(4)	Input connector		M8 terminal			
	Input wire	100 V	22 mm²	—		
		200 V	8 mm²			
	Output connector		M8 terminal			
	Output wire		14 mm² (2-wire), 8 mm² (3-wire)			
	Grounding wire		8 mm²			
	Input distribution board breaker capacity	100 V	80 A or more	—		
		200 V	40 A or more	60 A or more	40 A or more	
Operating environment			Temperature: 0 to 40°C, humidity: 10 to 90% RH (non-condensing)			
Storage environment(5)			Temperature: -15 to +50°C, humidity: 10 to 90% RH (non-condensing)			
Expected service life (of the UPS unit excluding battery)			10 years (At a 30°C average ambient temperature. For reference purposes only.)			
EMC standard			—			
UPS classification according to IEC standard			VFI-XX-111			
Separate options						
Floor mounting brackets(6)			FMA11NA00 (1 pc)			
Air filter kit(7)			FLA11NA00-3U (3U, 1 pc) or FLA11NA00-4U (4U, 1 pc)			
Replacement battery pack model no.			BPA11N006A00M (3U, 2 pcs) or BPA11N009A00M (4U, 2 pcs)			

(1) AC input voltage range changes depending on the load level.
For model numbers ending in "**W1**": the input voltage range is within -35% to +15% of the rated value at load levels ≤ 70%, and is within ±15% of the rated value at load levels > 70% (The lower limit is -15% when returning from outside the range.)
For model numbers ending in "**W2**" or "**Z**": the input voltage range is within -40% to +15% of the rated value at load levels ≤ 70%, and is within -20% to +15% of the rated value at load levels > 70% (The lower limit is -20% when returning from outside the range).

(2) At the auto-sensing setting, the frequency synchronizing range can be set to ±1, 3, or 5%. At the auto-sensing setting, the input frequency range is within ±8% of the rated frequency. Also, for the inverter to start running, the input frequency must be within the set synchronizing frequency range. When fixed-frequency setting is selected, output frequency is fixed to either 50 Hz or 60 Hz regardless of input frequency. At the fixed-frequency setting, the input frequency range is 40 to 120 Hz.

(3) Uninterrupted transfer to the bypass circuit is only possible when all of the following conditions are true: the frequency setting is set to automatic; input frequency is within the synchronizing range; input voltage is within the allowable range.

(4) Communications:
a. Dry contact signal: D-sub 15-pin female, with M3 fixing screws
b. PC port: USB Type C
c. Remote control: One-touch terminal block, compatible wire size: 24 to 16 AWG

(5) Avoid use or storage in 30°C or higher temperatures for extended periods of time, or the battery life will shorten. If a UPS is to be stored for a long period, it will be necessary to recharge batteries once every two to six months.

(6) Used to secure the UPS to the floor.

(7) Front side air intake filter to prevent dust ingress.

Note 1: Output power is supplied from the inverter at start-up. (Inverter start-up type)

Note 2: The Instruction Manuals included with these models are in Japanese.

Specifications

Output capacity 10 kVA

Order no.		5-minute backup model (3U)		S-A11N103A005T	S-A11N103A005S2△△[1]
		10-minute backup model (4U)		—	S-A11N103A010S2△△[1]
Rated output capacity (apparent power / active power)		Single-unit/Parallel operation (N config.)		10 kVA / 9 kW	
		Parallel redundant operation (N+1 config.)		5 kVA / 4.5 kW	
Technology		Topology		Double conversion online	
		Cooling system		Forced air cooling	
		Inverter		High-frequency PWM	
AC input	No. of phases/wires			Single-phase 2-wire	
	Rated voltage			200/208/220/230/240 V (Same as output voltage)	
	Voltage range[2]			Within -40 to +15% of rated voltage	
	Rated frequency			50/60 Hz (Auto-sensing or fixed-frequency mode selectable.[3] Factory setting: auto-sensing)	
	Required capacity		N config.	11 kVA or less	
			N+1 config.	6.2 kVA or less	
	Input power factor			0.95 or greater (at rated input voltage, input voltage harmonic distortion < 1%)	
AC output	No. of phases/wires			Single-phase 2-wire	
	Rated voltage			200/208/220/230/240 V (Selectable. Factory setting: 200 V)	
	Voltage regulation			Within ±2% of rated voltage	
	Rated frequency			50/60 Hz (Same as input frequency)	
	Frequency regulation[3]	In grid operation		Within ±1/3/5% of rated frequency (Selectable. Factory setting: ±3%)	
		At free run (asynchronous)		Within ±0.5% of rated frequency	
	Voltage waveform			Sinusoidal	
	Voltage harmonic distortion	At linear load		3% or less (At rated output)	
		At rectifier load		7% or less (At rated output)	
	Load power factor	Rated		0.9 lagging (Variation range: 0.7 lagging to 1.0)	
	Transient voltage fluctuation	For abrupt load change		Within ±5% of rated voltage (For 10⇔100% abrupt change)	
		For loss/return of input power		Within ±5% of rated voltage	
		For abrupt input voltage change		Within ±5% of rated voltage (For ±10% abrupt change)	
	Overcurrent protection		N config.	110% or more (Automatic transfer to bypass circuit[4] if exceeded)	
			N+1 config.	220% or more (Automatic transfer to bypass circuit[4] if exceeded)	
	Overload capability	Inverter	N config.	110% (for 1 min), 118% (instantly)	
			N+1 config.	220% (for 1 min), 236% (instantly)	
		Bypass	N config.	200% (for 30 s), 800% (for 2 cycles)	
			N+1 config.	400% (for 30 s), 1600% (for 2 cycles)	
Battery	Type			Small-sized valve-regulated lead-acid (VRLA) battery	
	Backup time			5 min (At 25°C ambient temperature and load power factor of 0.9, using new, fully charged batteries) or 10 min (At 25°C ambient temperature and load power factor of 0.8, using new, fully charged batteries)	
	Quantity			32 pcs (12 V per battery)	
	Total capacity			5-minute backup models: 2400 Wh, 10-minute backup models: 3264 Wh	
	Expected life			5 years (At a 25°C ambient temperature. For reference purposes only.)	
Acoustic noise (1 m from front of UPS, A-weighted)		Excluding start of charging		50 dB or less	
		At start of charging		53 dB or less	
Heat dissipation (at rated output after fully charged)				574 W	
Input leakage current				18 mA or less	28 mA or less
I/O connector, wire gauge, etc.[5]		Input connector		M6 terminal	M8 terminal
		Input wire		22 mm²	
		Output connector		M6 terminal NEMA L6-30R ×2 NEMA L6-20R ×2	M8 terminal NEMA L6-30R ×4
		Output wire		22 mm²	
		Grounding wire		14 mm²	
		Input distribution board breaker capacity		80 A or more	
Operating environment				Temperature: 0 to 40°C, humidity: 10 to 90% RH (non-condensing)	
Storage environment[6]				Temperature: -15 to +50°C, humidity: 10 to 90% RH (non-condensing)	
Expected service life (of the UPS unit excluding battery)				10 years (At a 30°C average ambient temperature. For reference purposes only.)	
EMC standard				Compliant with VCCI 32-1 Class A[7]	—
UPS classification according to IEC standard				VFI-SS-111	
Separate options					
Rack support rails[8]		5-minute backup		RM027-US (3U, 2 pairs)	RM027-US (3U, 2 pairs), RM028-US (4U, 1 pair)
		10-minute backup		—	RM028-US (4U, 3 pairs)
Casterbase [9]				CBA11NA00/CBA11NA01	—
Floor mounting brackets[10]				—	FMA11NA00 (1 pc)
Air filter kit[11]				FLA11NA00-3U (3U, 2 pcs) or FLA11NA00-4U (4U, 2 pcs)	
Replacement battery pack model no.				BPA11N006A00M (3U, 4 pcs) or BPA11N009A00M (4U, 4 pcs)	

(1) The rack mount models have model numbers ending in **"RM"** in place of wildcard characters.

(2) AC input voltage range changes depending on the load level. The input voltage range is within -40% to +15% of the rated value at load levels ≤ 70%, and is within -20% to +15% of the rated value at load levels > 70%.

(3) At the auto-sensing setting, the frequency synchronizing range can be set to ±1, 3, or 5%. At the auto-sensing setting, the input frequency range is within ±8% of the rated frequency. Also, for the inverter to start running, the input frequency must be within the set synchronizing frequency range. When fixed-frequency setting is selected, output frequency is fixed to either 50 Hz or 60 Hz regardless of input frequency. At the fixed-frequency setting, the input frequency range is 40 to 120 Hz.

(4) Uninterrupted transfer to the bypass circuit is only possible when all of the following conditions are true: the frequency setting is set to automatic; input frequency is within the synchronizing range; input voltage is within the allowable range.

(5) Communications:
a. Dry contact signal: D-sub 15-pin female, with M3 fixing screws
b. PC port: USB Type C
c. Remote control: One-touch terminal block, compatible wire size: 24 to 16 AWG

(6) Avoid use or storage in 30°C or higher temperatures for extended periods of time, or the battery life will shorten. If a UPS is to be stored for a long period, it will be necessary to recharge batteries once every two to six months.

(7) 5-minute backup models (3U) only

(8) Used for mounting the UPS on an EIA standard 19-inch rack. Prior to purchase, check that the rails are mountable to your 19-inch rack.

(9) Used to move a UPS. Can be secured with floor-mounting brackets.

(10) Used to secure the UPS to the floor.

(11) Front side air intake filter to prevent dust ingress.

Note 1: Output power is supplied from the inverter at start-up. (Inverter start-up type)

Note 2: The Instruction Manuals included with these models are in Japanese.

Specifications

Output capacity 10 kVA

Order no.				S-A11N103A005W1	S-A11N103A005W2	S-A11N103A005Z
		5-minute backup model (3U)		S-A11N103A010W1	S-A11N103A010W2	S-A11N103A010Z
Rated output capacity (apparent power / active power)		Single-unit/Parallel operation (N config.)		10 kVA / 9 kW		
		Parallel redundant operation (N+1 config.)		5 kVA / 4.5 kW		
Technology		Topology		Double conversion online		
		Cooling system		Forced air cooling		
		Inverter		High-frequency PWM		
AC input	No. of phases/wires			Single-phase 2-wire		
	Rated voltage			100/200 V	200 V	
	Voltage range[1]			Within -35 to +15% of rated voltage	Within -40 to +15% of rated voltage	
	Rated frequency			50/60 Hz (Auto-sensing or fixed-frequency mode selectable.[2] Factory setting: auto-sensing)		
	Required capacity		N config.	12 kVA or less		
			N+1 config.	6.7 kVA or less		
	Input power factor			0.95 or greater (at rated input voltage, input voltage harmonic distortion < 1%)		
AC output	No. of phases/wires			Single-phase 2-wire or single-phase 3-wire		
	Rated voltage			100 V (2-wire) or 100/200 V (3-wire)		
	Voltage regulation			Within ±5% of rated voltage		
	Rated frequency			50/60 Hz (Same as input frequency)		
	Frequency regulation[2]	In grid operation		Within ±1/3/5% of rated frequency (Selectable. Factory setting: ±3%)		
		At free run (asynchronous)		Within ±0.5% of rated frequency		
	Voltage waveform			Sinusoidal		
	Voltage harmonic distortion	At linear load		3% or less (At rated output)		
		At rectifier load		—		
	Load power factor	Rated		0.9 lagging (Variation range: 0.7 lagging to 1.0)		
	Transient voltage fluctuation	For abrupt load change		Within ±5% of rated voltage (For 20⇔100% abrupt change)		
		For loss/return of input power		Within ±5% of rated voltage		
		For abrupt input voltage change		Within ±5% of rated voltage (For ±10% abrupt change)		
	Overcurrent protection		N config.	104% or more (Automatic transfer to bypass circuit[3] if exceeded)		
			N+1 config.	208% or more (Automatic transfer to bypass circuit[3] if exceeded)		
	Overload capability	Inverter	N config.	104% (for 1 min), 112% (instantly)		
			N+1 config.	208% (for 1 min), 224% (instantly)		
		Bypass	N config.	200% (for 30 s), 800% (for 2 cycles)		
			N+1 config.	400% (for 30 s), 1600% (for 2 cycles)		
Battery	Type			Small-sized valve-regulated lead-acid (VRLA) battery		
	Backup time			5 min (At 25°C ambient temperature and load power factor of 0.9, using new, fully charged batteries) or 10 min (At 25°C ambient temperature and load power factor of 0.8, using new, fully charged batteries)		
	Quantity			32 pcs (12 V per battery)		
	Total capacity			5-minute backup models: 2400 Wh, 10-minute backup models: 3264 Wh		
	Expected life			5 years (At a 25°C ambient temperature. For reference purposes only.)		
Acoustic noise (1 m from front of UPS, A-weighted)		Excluding start of charging		55 dB or less		
		At start of charging		55 dB or less		
Heat dissipation (at rated output after fully charged)				1345 W	1000 W	
Input leakage current				25 mA or less		
I/O connector, wire gauge, etc.[4]		Input connector		M8 terminal		
		Input wire	100 V	38 mm²	—	
			200 V	22 mm²		
		Output connector		M8 terminal		
		Output wire		38 mm² (2-wire), 14 mm² (3-wire)		
		Grounding wire		14 mm²		
		Input distribution board breaker capacity	100 V	160 A or more	—	
			200 V	80 A or more	125 A or more	80 A or more
Operating environment				Temperature: 0 to 40°C, humidity: 10 to 90% RH (non-condensing)		
Storage environment[5]				Temperature: -15 to +50°C, humidity: 10 to 90% RH (non-condensing)		
Expected service life (of the UPS unit excluding battery)				10 years (At a 30°C average ambient temperature. For reference purposes only.)		
EMC standard				—		
UPS classification according to IEC standard				VFI-XX-111		
Separate options						
Floor mounting brackets[6]				FMA11NA00 (1 pc)		
Air filter kit[7]				FLA11NA00-3U (3U, 2 pcs) or FLA11NA00-4U (4U, 2 pcs)		
Replacement battery pack model no.				BPA11N006A00M (3U, 4 pcs) or BPA11N009A00M (4U, 4 pcs)		

(1) AC input voltage range changes depending on the load level.
For model numbers ending in "**W1**": the input voltage range is within -35% to +15% of the rated value at load levels ≤ 70%, and is within ±15% of the rated value at load levels > 70% (The lower limit is -15% when returning from outside the range).
For model numbers ending in "**W2**" or "**Z**": the input voltage range is within -40% to +15% of the rated value at load levels ≤ 70%, and is within -20% to +15% of the rated value at load levels > 70% (The lower limit is -20% when returning from outside the range).

(2) At the auto-sensing setting, the frequency synchronizing range can be set to ±1, 3, or 5%. At the auto-sensing setting, the input frequency range is within ±8% of the rated frequency. Also, for the inverter to start running, the input frequency must be within the set synchronizing frequency range. When fixed-frequency setting is selected, output frequency is fixed to either 50 Hz or 60 Hz regardless of input frequency. At the fixed-frequency setting, the input frequency range is 40 to 120 Hz.

(3) Uninterrupted transfer to the bypass circuit is only possible when all of the following conditions are true: the frequency setting is set to automatic; input frequency is within the synchronizing range; input voltage is within the allowable range.

(4) Communications:
a. Dry contact signal: D-sub 15-pin female, with M3 fixing screws
b. PC port: USB Type C
c. Remote control: One-touch terminal block, compatible wire size: 24 to 16 AWG

(5) Avoid use or storage in 30°C or higher temperatures for extended periods of time, or the battery life will shorten. If a UPS is to be stored for a long period, it will be necessary to recharge batteries once every two to six months.

(6) Used to secure the UPS to the floor.

(7) Front side air intake filter to prevent dust ingress.

Note 1: Output power is supplied from the inverter at start-up. (Inverter start-up type)

Note 2: The Instruction Manuals included with these models are in Japanese.

Specifications

Output capacity 15 kVA

Order no.		5-minute backup model (3U)		S-A11N153A005S2△△(1)	S-A11N153A005Z
		10-minute backup model (4U)		S-A11N153A010S2△△(1)	S-A11N153A010Z
Rated output capacity (apparent power / active power)		Single-unit/Parallel operation (N config.)		15 kVA / 13.5 kW	
		Parallel redundant operation (N+1 config.)		10 kVA / 9 kW	
Technology		Topology		Double conversion online	
		Cooling system		Forced air cooling	
		Inverter		High-frequency PWM	
AC input	No. of phases/wires			Single-phase 2-wire	
	Rated voltage			200/208/220/230/240 V (Same as output voltage)	200 V
	Voltage range(2)			Within -40 to +15% of rated voltage	
	Rated frequency			50/60 Hz (Auto-sensing or fixed-frequency mode selectable.(3) Factory setting: auto-sensing)	
	Required capacity		N config.	16.5 kVA or less	18 kVA or less
			N+1 config.	11.7 kVA or less	12.7 kVA or less
	Input power factor			0.95 or greater (at rated input voltage, input voltage harmonic distortion < 1%)	
AC output	No. of phases/wires			Single-phase 2-wire	Single-phase 2-wire or single-phase 3-wire
	Rated voltage			200/208/220/230/240 V (Selectable. Factory setting: 200 V)	100 V (2-wire) or 100/200 V (3-wire)
	Voltage regulation			Within ±2% of rated voltage	Within ±5% of rated voltage
	Rated frequency			50/60 Hz (Same as input frequency)	
	Frequency regulation(3)	In grid operation		Within ±1/3/5% of rated frequency (Selectable. Factory setting: ±3%)	
		At free run (asynchronous)		Within ±0.5% of rated frequency	
	Voltage waveform			Sinusoidal	
	Voltage harmonic distortion	At linear load		3% or less (At rated output)	3% or less (At rated output)
		At rectifier load		7% or less (At rated output)	—
	Load power factor	Rated		0.9 lagging (Variation range: 0.7 lagging to 1.0)	
	Transient voltage fluctuation	For abrupt load change		Within ±5% of rated voltage (For 10⇔100% abrupt change)	Within ±5% of rated voltage (For 20⇔100% abrupt change)
		For loss/return of input power		Within ±5% of rated voltage	
		For abrupt input voltage change		Within ±5% of rated voltage (For ±10% abrupt change)	
	Overcurrent protection		N config.	110% or more (Automatic transfer to bypass circuit(4) if exceeded)	104% or more (Automatic transfer to bypass circuit(4) if exceeded)
			N+1 config.	165% or more (Automatic transfer to bypass circuit(4) if exceeded)	156% or more (Automatic transfer to bypass circuit(4) if exceeded)
	Overload capability	Inverter	N config.	110% (for 1 min), 118% (instantly)	104% (for 1 min), 112% (instantly)
			N+1 config.	165% (for 1 min), 177% (instantly)	156% (for 1 min), 168% (instantly)
		Bypass	N config.	200% (for 30 s), 800% (for 2 cycles)	
			N+1 config.	300% (for 30 s), 1200% (for 2 cycles)	
Battery	Type			Small-sized valve-regulated lead-acid (VRLA) battery	
	Backup time			5 min (At 25°C ambient temperature and load power factor of 0.9, using new, fully charged batteries) or 10 min (At 25°C ambient temperature and load power factor of 0.8, using new, fully charged batteries)	
	Quantity			48 pcs (12 V per battery)	
	Total capacity			5-minute backup models: 3600 Wh, 10-minute backup models: 4896 Wh	
	Expected life			5 years (At a 25°C ambient temperature. For reference purposes only.)	
Acoustic noise (1 m from front of UPS, A-weighted)		Excluding start of charging		55 dB or less	
		At start of charging		55 dB or less	
Heat dissipation (at rated output after fully charged)				862 W	1500 W
Input leakage current				34 mA or less	30 mA or less
I/O connector, wire gauge, etc.(5)		Input connector		M8 terminal	
		Input wire		38 mm²	
		Output connector		M8 terminal NEMA L6-30R ×4	M8 terminal
		Output wire		38 mm²	22 mm²×2 (2-wire), 38 mm² (3-wire)
		Grounding wire		14 mm²	
		Input distribution board breaker capacity		125 A or more	
Operating environment				Temperature: 0 to 40°C, humidity: 10 to 90% RH (non-condensing)	
Storage environment(6)				Temperature: -15 to +50°C, humidity: 10 to 90% RH (non-condensing)	
Expected service life (of the UPS unit excluding battery)				10 years (At a 30°C average ambient temperature. For reference purposes only.)	
EMC standard				—	
UPS classification according to IEC standard				VFI-SS-111	VFI-XX-111
Separate options					
Rack support rails(7)		5-minute backup		RM027-US (3U, 3 pairs), RM028-US (4U, 1 pair)	—
		10-minute backup		RM028-US (4U, 4 pairs)	—
Floor mounting brackets(8)				FMA11NA00 (1 pc)	
Air filter kit(9)				FLA11NA00-3U (3U, 3 pcs) or FLA11NA00-4U (4U, 3 pcs)	
Replacement battery pack model no.				BPA11N006A00M (3U, 6 pcs) or BPA11N009A00M (4U, 6 pcs)	

(1) The rack mount models have model numbers ending in **"RM"** in place of wildcard characters.

(2) AC input voltage range changes depending on the load level. The input voltage range is within -40% to +15% of the rated value at load levels ≤ 70%, and is within -20% to +15% of the rated value at load levels > 70%.

(3) At the auto-sensing setting, the frequency synchronizing range can be set to ±1, 3, or 5%. At the auto-sensing setting, the input frequency range is within ±8% of the rated frequency. Also, for the inverter to start running, the input frequency must be within the set synchronizing frequency range. When fixed-frequency setting is selected, output frequency is fixed to either 50 Hz or 60 Hz regardless of input frequency. At the fixed-frequency setting, the input frequency range is 40 to 120 Hz.

(4) Uninterrupted transfer to the bypass circuit is only possible when all of the following conditions are true: the frequency setting is set to automatic; input frequency is within the synchronizing range; input voltage is within the allowable range.

(5) Communications:
a. Dry contact signal: D-sub 15-pin female, with M3 fixing screws
b. PC port: USB Type C
c. Remote control: One-touch terminal block, compatible wire size: 24 to 16 AWG

(6) Avoid use or storage in 30°C or higher temperatures for extended periods of time, or the battery life will shorten. If a UPS is to be stored for a long period, it will be necessary to recharge batteries once every two to six months.

(7) Used for mounting the UPS on an EIA standard 19-inch rack. Prior to purchase, check that the rails are mountable to your 19-inch rack.

(8) Used to secure the UPS to the floor.

(9) Front side air intake filter to prevent dust ingress.

Note 1: Output power is supplied from the inverter at start-up. (Inverter start-up type)
Note 2: The Instruction Manuals included with these models are in Japanese.

Specifications

Output capacity 20 kVA

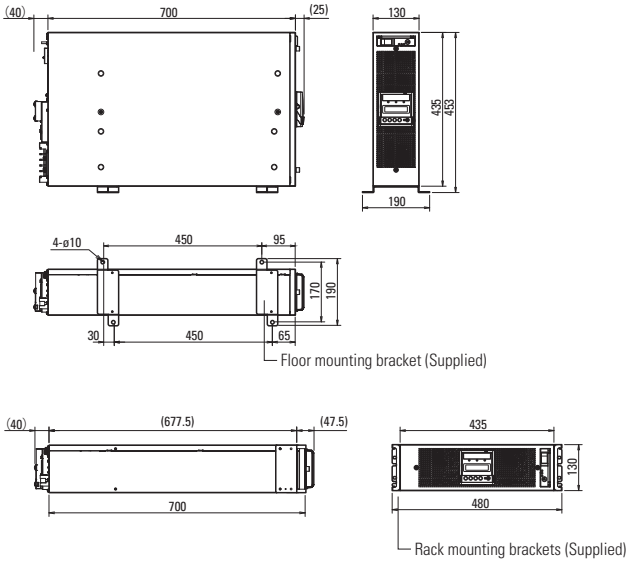
Order no.		5-minute backup model (3U)		**S-A11N203A005S2△△**[1]	**S-A11N203A005Z**
		10-minute backup model (4U)		**S-A11N203A010S2△△**[1]	**S-A11N203A010Z**
Rated output capacity (apparent power / active power)		Single-unit/Parallel operation (N config.)		20 kVA / 18 kW	
		Parallel redundant operation (N+1 config.)		15 kVA / 13.5 kW	
Technology		Topology		Double conversion online	
		Cooling system		Forced air cooling	
		Inverter		High-frequency PWM	
AC input	No. of phases/wires			Single-phase 2-wire	
	Rated voltage			200/208/220/230/240 V (Same as output voltage)	200 V
	Voltage range[2]			Within -40 to +15% of rated voltage	
	Rated frequency			50/60 Hz (Auto-sensing or fixed-frequency mode selectable.(3) Factory setting: auto-sensing)	
	Required capacity		N config.	22 kVA or less	24 kVA or less
			N+1 config.	17.2 kVA or less	18.7 kVA or less
	Input power factor			0.95 or greater (at rated input voltage, input voltage harmonic distortion < 1%)	
AC output	No. of phases/wires			Single-phase 2-wire	Single-phase 2-wire or single-phase 3-wire
	Rated voltage			200/208/220/230/240 V (Selectable. Factory setting: 200 V)	100 V (2-wire) or 100/200 V (3-wire)
	Voltage regulation			Within ±2% of rated voltage	Within ±5% of rated voltage
	Rated frequency			50/60 Hz (Same as input frequency)	
	Frequency regulation[3]	In grid operation		Within ±1/3/5% of rated frequency (Selectable. Factory setting: ±3%)	
		At free run (asynchronous)		Within ±0.5% of rated frequency	
	Voltage waveform			Sinusoidal	
	Voltage harmonic distortion	At linear load		3% or less (At rated output)	3% or less (At rated output)
		At rectifier load		7% or less (At rated output)	—
	Load power factor	Rated		0.9 lagging (Variation range: 0.7 lagging to 1.0)	
	Transient voltage fluctuation	For abrupt load change		Within ±5% of rated voltage (For 10⇔100% abrupt change)	Within ±5% of rated voltage (For 20⇔100% abrupt change)
		For loss/return of input power		Within ±5% of rated voltage	
		For abrupt input voltage change		Within ±5% of rated voltage (For ±10% abrupt change)	
	Overcurrent protection		N config.	110% or more (Automatic transfer to bypass circuit[4] if exceeded)	104% or more (Automatic transfer to bypass circuit[4] if exceeded)
			N+1 config.	147% or more (Automatic transfer to bypass circuit[4] if exceeded)	138% or more (Automatic transfer to bypass circuit[4] if exceeded)
	Overload capability	Inverter	N config.	110% (for 1 min), 118% (instantly)	104% (for 1 min), 112% (instantly)
			N+1 config.	147% (for 1 min), 157% (instantly)	138% (for 1 min), 149% (instantly)
		Bypass	N config.	200% (for 30 s), 800% (for 2 cycles)	
			N+1 config.	267% (for 30 s), 1067% (for 2 cycles)	
Battery	Type			Small-sized valve-regulated lead-acid (VRLA) battery	
	Backup time			5 min (At 25°C ambient temperature and load power factor of 0.9, using new, fully charged batteries) or 10 min (At 25°C ambient temperature and load power factor of 0.8, using new, fully charged batteries)	
	Quantity			64 pcs (12 V per battery)	
	Total capacity			5-minute backup models: 4800 Wh, 10-minute backup models: 6528 Wh	
	Expected life			5 years (At a 25°C ambient temperature. For reference purposes only.)	
Acoustic noise (1 m from front of UPS, A-weighted)		Excluding start of charging		55 dB or less	
		At start of charging		55 dB or less	
Heat dissipation (at rated output after fully charged)				1149 W	2000 W
Input leakage current				40 mA or less	35 mA or less
I/O connector, wire gauge, etc.[5]		Input connector		M8 terminal	
		Input wire		60 mm²	
		Output connector		M8 terminal NEMA L6-30R ×4	M8 terminal
		Output wire		60 mm²	38 mm²×2 (2-wire), 60 mm² (3-wire)
		Grounding wire		14 mm²	
		Input distribution board breaker capacity		160 A or more	
Operating environment				Temperature: 0 to 40°C, humidity: 10 to 90% RH (non-condensing)	
Storage environment[6]				Temperature: -15 to +50°C, humidity: 10 to 90% RH (non-condensing)	
Expected service life (of the UPS unit excluding battery)				10 years (At a 30°C average ambient temperature. For reference purposes only.)	
EMC standard				—	
UPS classification according to IEC standard				VFI-SS-111	VFI-XX-111
Separate options					
Rack support rails[7]		5-minute backup		RM027-US (3U, 4 pairs), RM028-US (4U, 1 pair)	—
		10-minute backup		RM028-US (4U, 5 pairs)	—
Floor mounting brackets[8]				FMA11NA00 (1 pc)	
Air filter kit[9]				FLA11NA00-3U (3U, 4 pcs) or FLA11NA00-4U (4U, 4 pcs)	
Replacement battery pack model no.				BPA11N006A00M (3U, 8 pcs) or BPA11N009A00M (4U, 8 pcs)	

(1) The rack mount models have model numbers ending in **"RM"** in place of wildcard characters.
(2) AC input voltage range changes depending on the load level. The input voltage range is within -40% to +15% of the rated value at load levels ≤ 70%, and is within -20% to +15% of the rated value at load levels > 70%.
(3) At the auto-sensing setting, the frequency synchronizing range can be set to ±1, 3, or 5%. At the auto-sensing setting, the input frequency range is within ±8% of the rated frequency. Also, for the inverter to start running, the input frequency must be within the set synchronizing frequency range. When fixed-frequency setting is selected, output frequency is fixed to either 50 Hz or 60 Hz regardless of input frequency. At the fixed-frequency setting, the input frequency range is 40 to 120 Hz.
(4) Uninterrupted transfer to the bypass circuit is only possible when all of the following conditions are true: the frequency setting is set to automatic; input frequency is within the synchronizing range; input voltage is within the allowable range.
(5) Communications:
a. Dry contact signal: D-sub 15-pin female, with M3 fixing screws
b. PC port: USB Type C
c. Remote control: One-touch terminal block, compatible wire size: 24 to 16 AWG
(6) Avoid use or storage in 30°C or higher temperatures for extended periods of time, or the battery life will shorten. If a UPS is to be stored for a long period, it will be necessary to recharge batteries once every two to six months.
(7) Used for mounting the UPS on an EIA standard 19-inch rack. Prior to purchase, check that the rails are mountable to your 19-inch rack.
(8) Used to secure the UPS to the floor.
(9) Front side air intake filter to prevent dust ingress.

Note 1: Output power is supplied from the inverter at start-up. (Inverter start-up type)
Note 2: The Instruction Manuals included with these models are in Japanese.

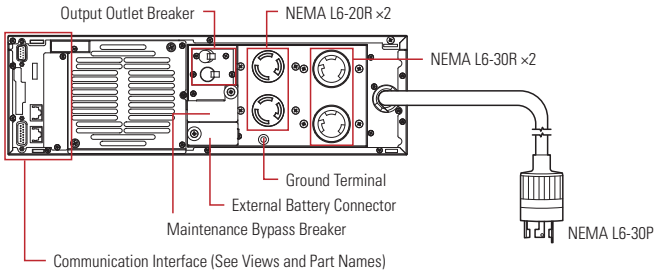
Dimensions (Unit: mm)

Fig. 1 Model: **S-A11N502A005**□



Mass: 63 kg

Model: **S-A11N502A005N**



Model: **S-A11N502A005T**

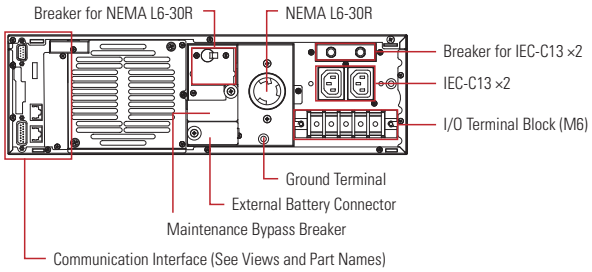
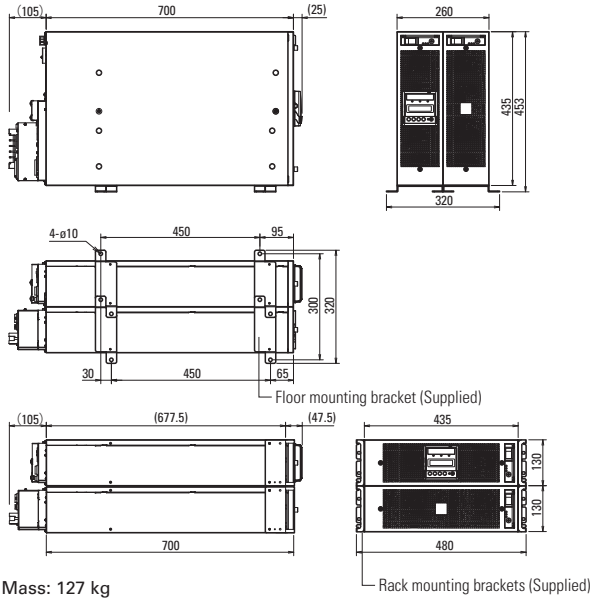
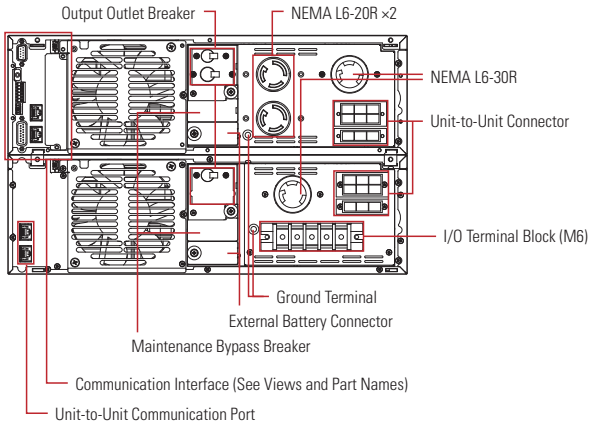


Fig. 2 Model: **S-A11N103A005T**



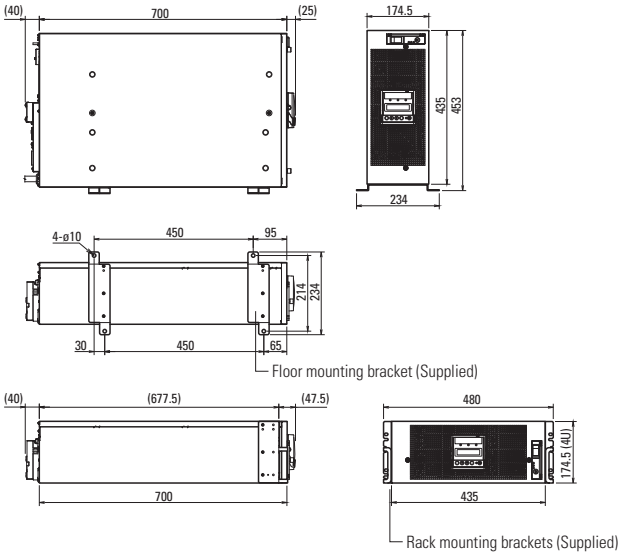
Mass: 127 kg



Paint color: Black (Munsell N1.5)

Dimensions (Unit: mm)

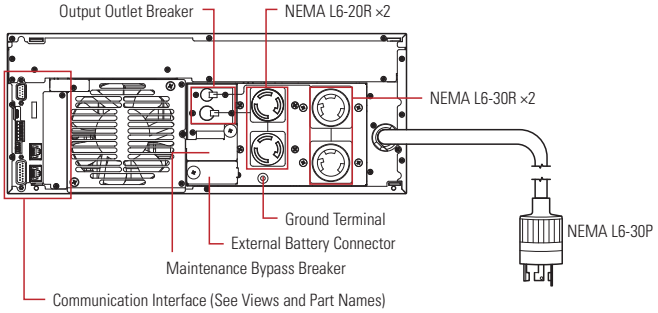
Fig. 3 Model: **S-A11N502A010**□



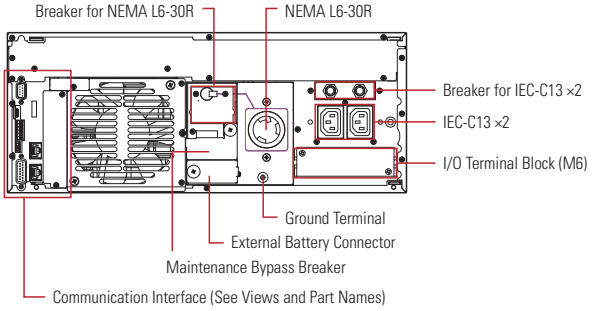
Mass: 80 kg

Paint color: Black (Munsell N1.5)

Model: **S-A11N502A010N**

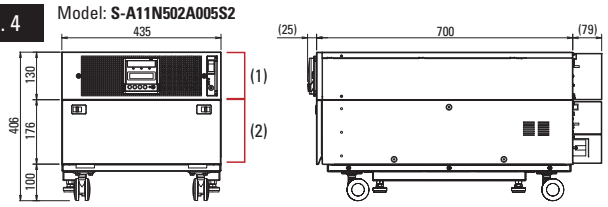


Model: **S-A11N502A010T**



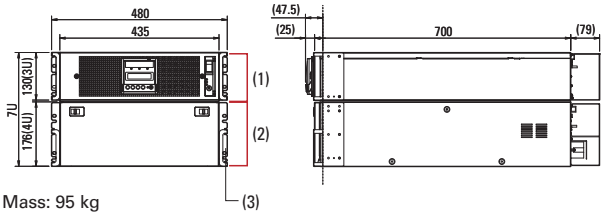
Dimensions (Unit: mm)

Fig. 4 Model: **S-A11N502A005S2**



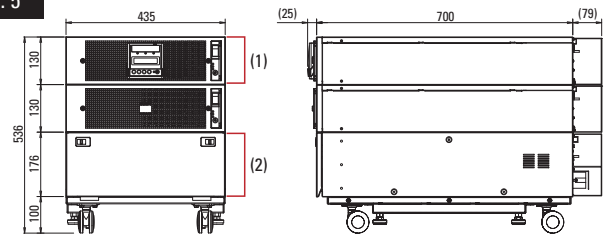
Mass: 110 kg

Model: **S-A11N502A005S2RM**



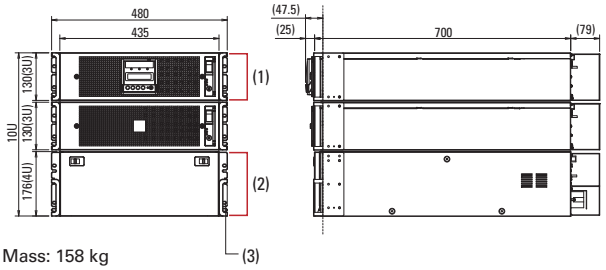
Mass: 95 kg

Fig. 5 Model: **S-A11N103A005S2**



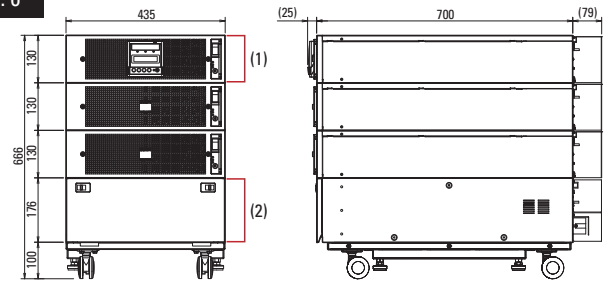
Mass: 170 kg

Model: **S-A11N103A005S2RM**



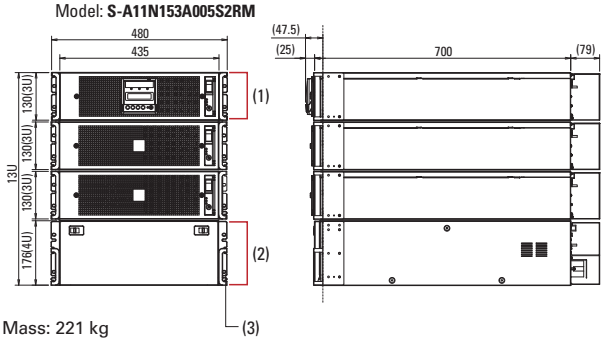
Mass: 158 kg

Fig. 6 Model: **S-A11N153A005S2**



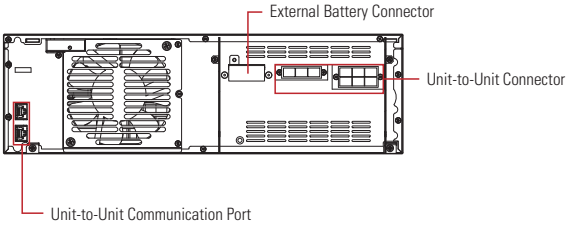
Mass: 230 kg

Model: **S-A11N153A005S2RM**

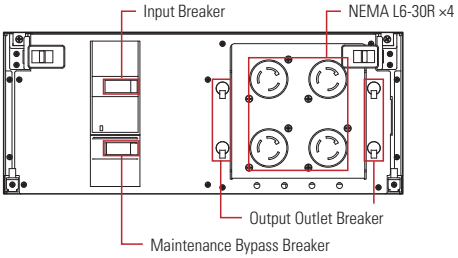


Mass: 221 kg

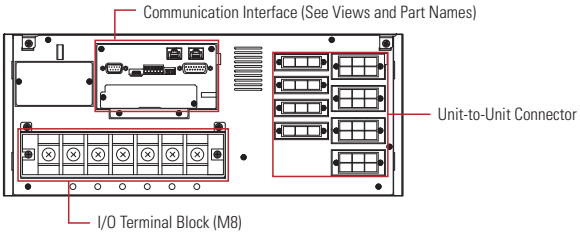
(1) UPS Unit - Rear View



(2) PDU - Front Interior View

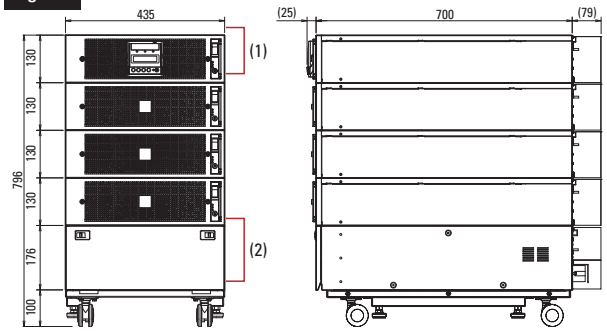


(2) PDU - Rear View



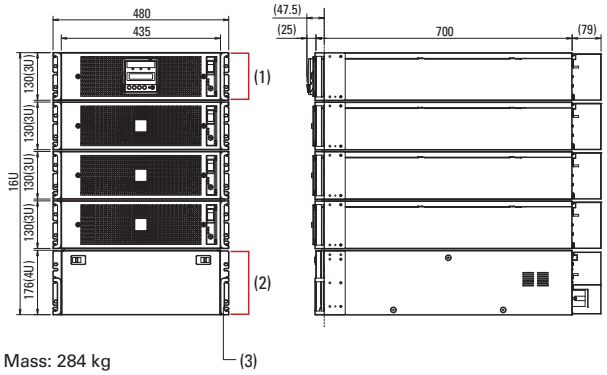
(3) Rack mounting brackets (Supplied)

Fig. 7 Model: **S-A11N203A005S2**



Mass: 290 kg

Model: **S-A11N203A005S2RM**

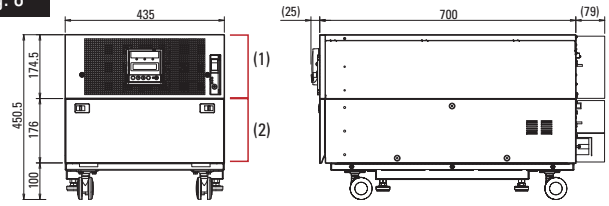


Mass: 284 kg

Paint color: Black (Munsell N1.5)

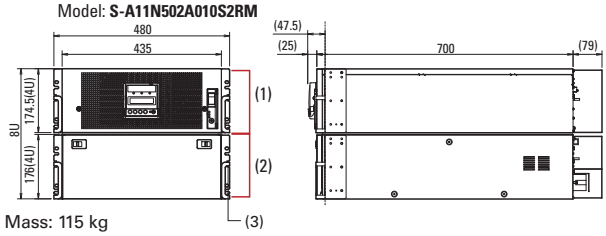
Dimensions (Unit: mm)

Fig. 8 Model: **S-A11N502A010S2**



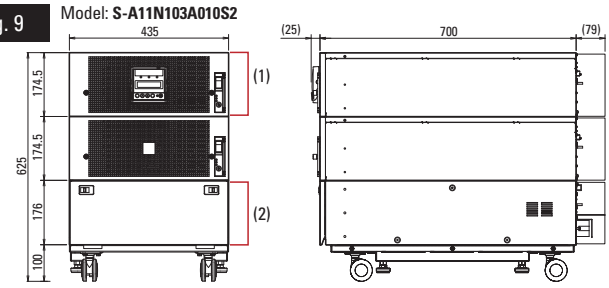
Mass: 130 kg

Model: **S-A11N502A010S2RM**



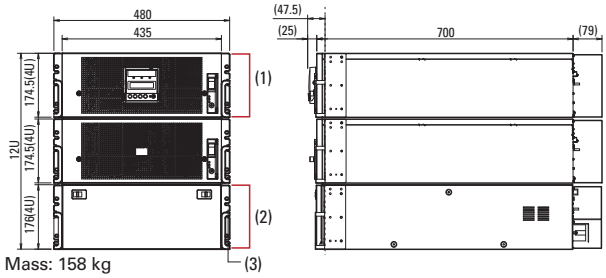
Mass: 115 kg

Fig. 9 Model: **S-A11N103A010S2**



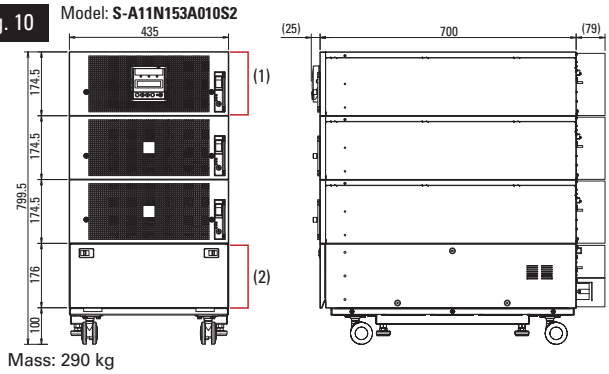
Mass: 210 kg

Model: **S-A11N103A010S2RM**



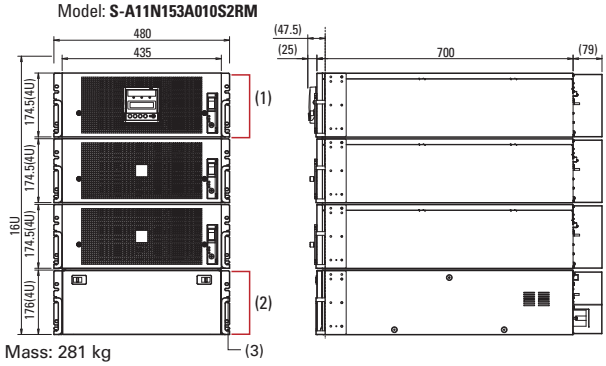
Mass: 158 kg

Fig. 10 Model: **S-A11N153A010S2**



Mass: 290 kg

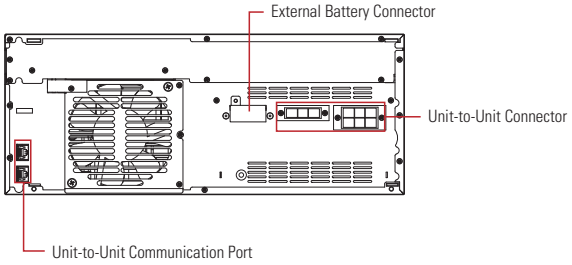
Model: **S-A11N153A010S2RM**



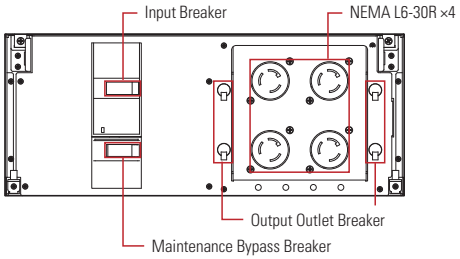
Mass: 281 kg

Paint color: Black (Munsell N1.5)

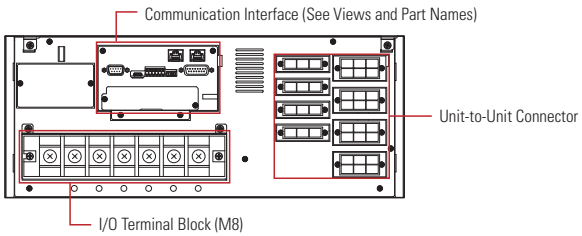
(1) UPS Unit - Rear View



(2) PDU - Front Interior View

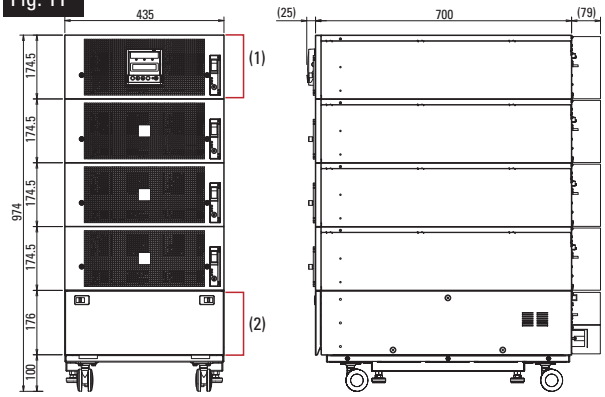


(2) PDU - Rear View



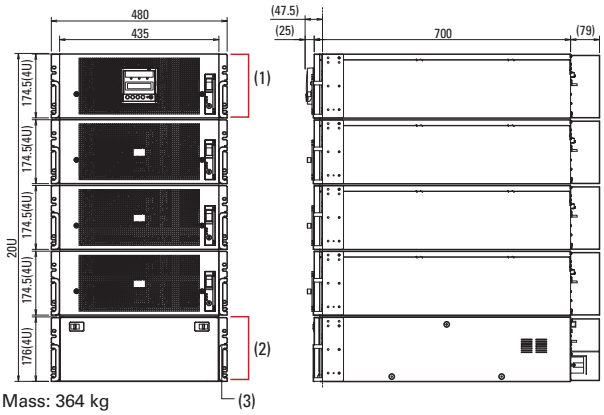
(3) Rack mounting brackets (Supplied)

Fig. 11 Model: **S-A11N203A010S2**



Mass: 370 kg

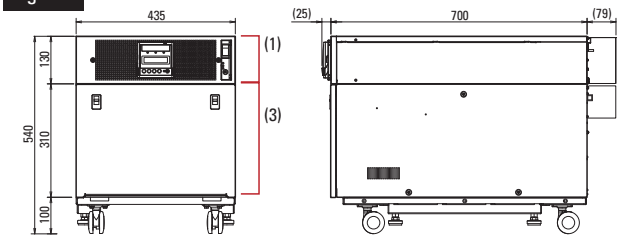
Model: **S-A11N203A010S2RM**



Mass: 364 kg

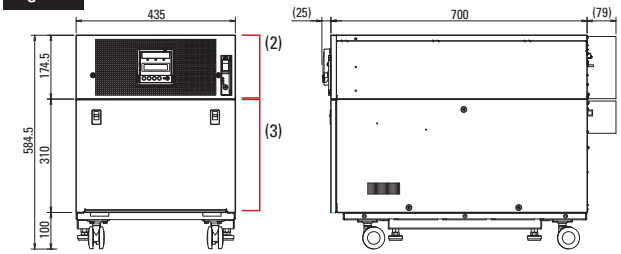
Dimensions (Unit: mm)

Fig. 12 Model: **S-A11N502A005W1**



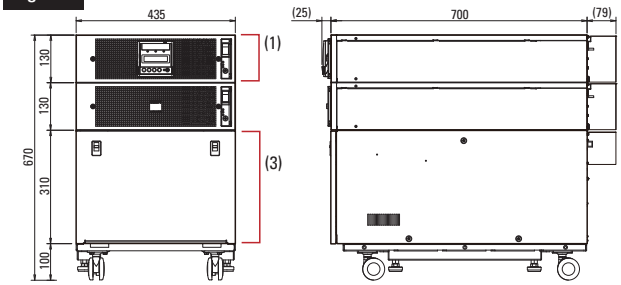
Mass: 195 kg

Fig. 13 Model: **S-A11N502A010W1**



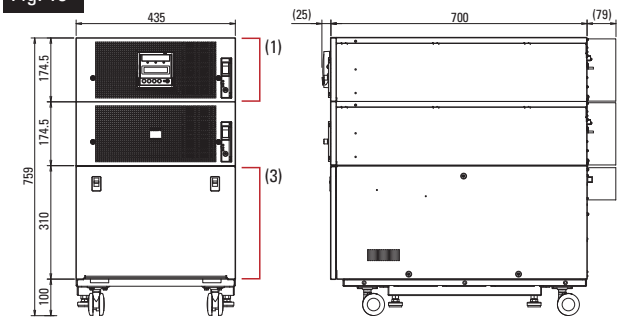
Mass: 215 kg

Fig. 14 Model: **S-A11N103A005W1**



Mass: 300 kg

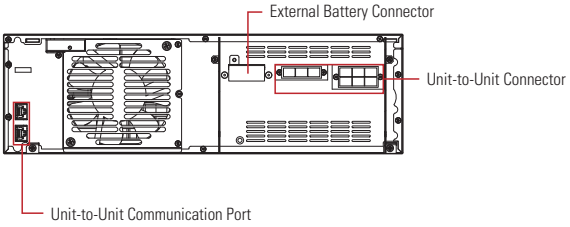
Fig. 15 Model: **S-A11N103A010W1**



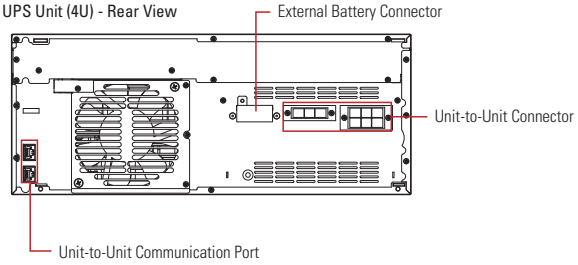
Mass: 340 kg

Paint color: Black (Munsell N1.5)

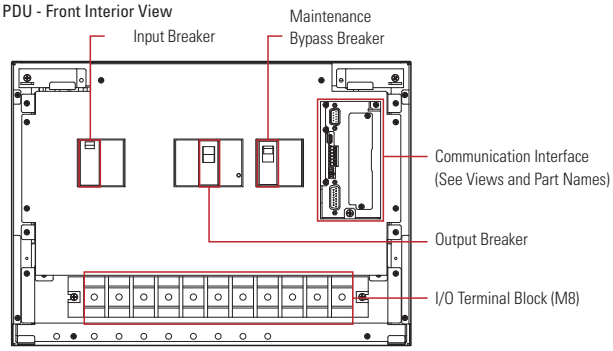
(1) UPS Unit (3U) - Rear View



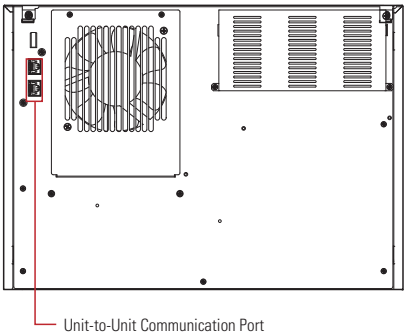
(2) UPS Unit (4U) - Rear View



(3) PDU - Front Interior View

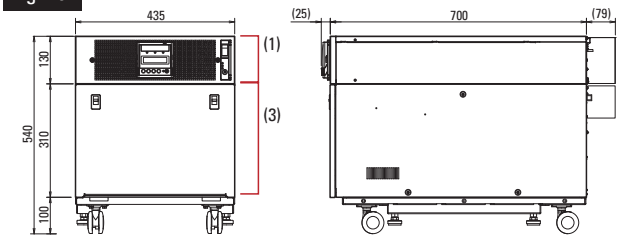


(3) PDU - Rear View



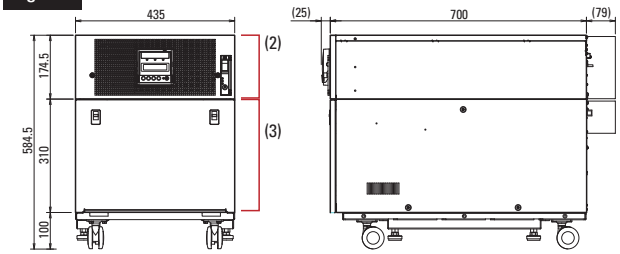
Dimensions (Unit: mm)

Fig. 16 Model: **S-A11N502A005W2**



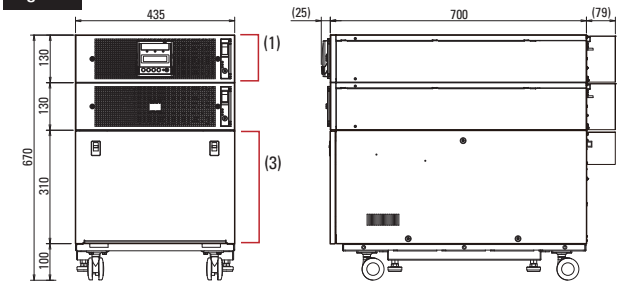
Mass: 170 kg

Fig. 17 Model: **S-A11N502A010W2**



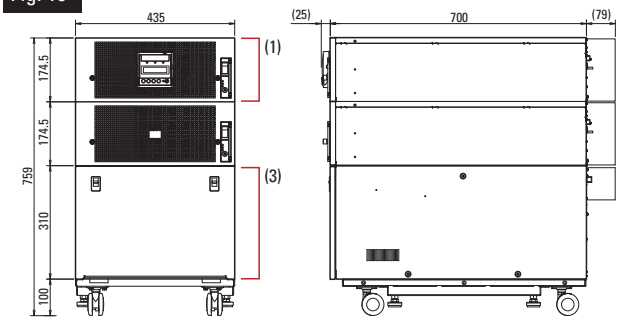
Mass: 190 kg

Fig. 18 Model: **S-A11N103A005W2**



Mass: 255 kg

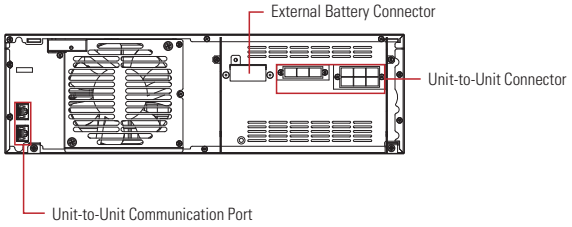
Fig. 19 Model: **S-A11N103A010W2**



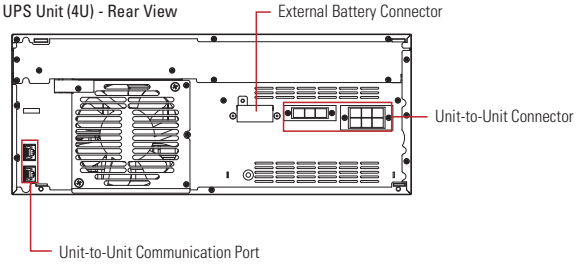
Mass: 295 kg

Paint color: Black (Munsell N1.5)

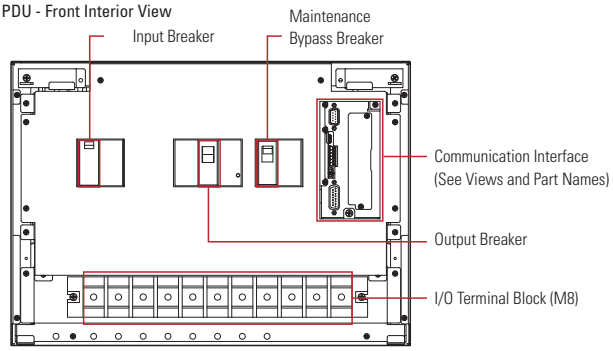
(1) UPS Unit (3U) - Rear View



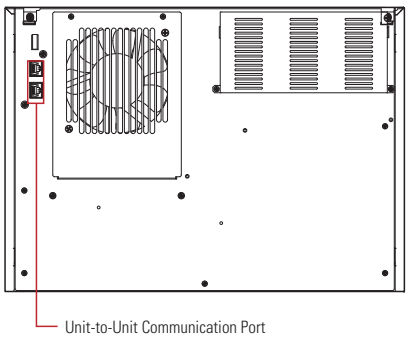
(2) UPS Unit (4U) - Rear View



(3) PDU - Front Interior View

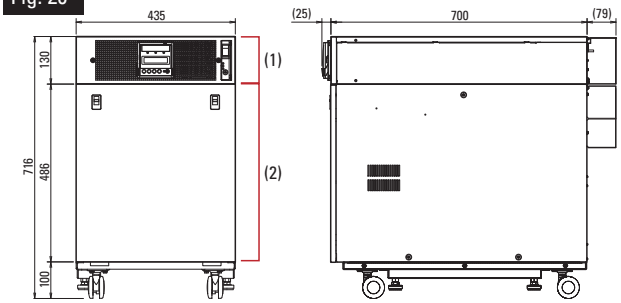


(3) PDU - Rear View



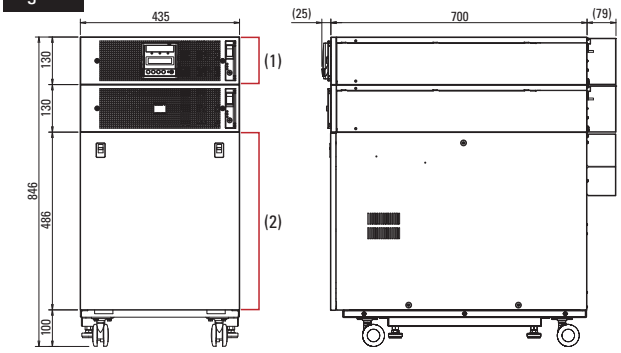
Dimensions (Unit: mm)

Fig. 20 Model: **S-A11N502A005Z**



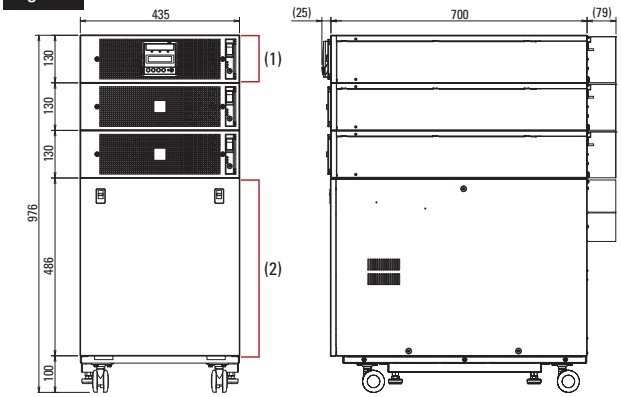
Mass: 270 kg

Fig. 21 Model: **S-A11N103A005Z**



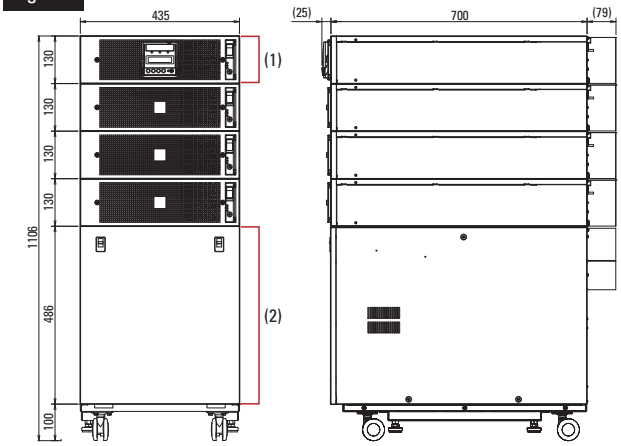
Mass: 330 kg

Fig. 22 Model: **S-A11N153A005Z**



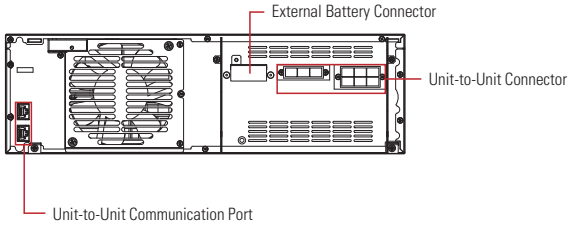
Mass: 390 kg

Fig. 23 Model: **S-A11N203A005Z**

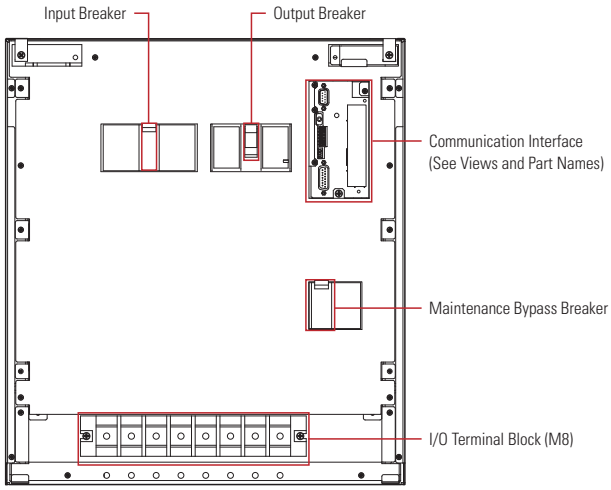


Mass: 450 kg

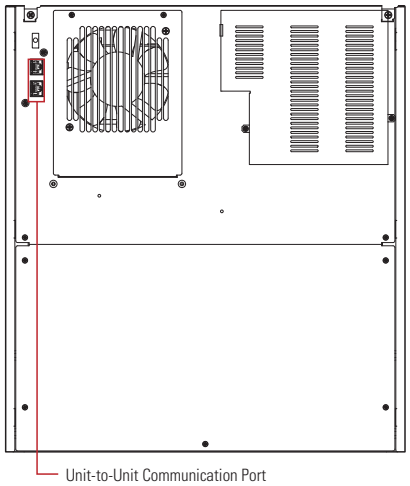
(1) UPS Unit - Rear View



(2) PDU - Front Interior View



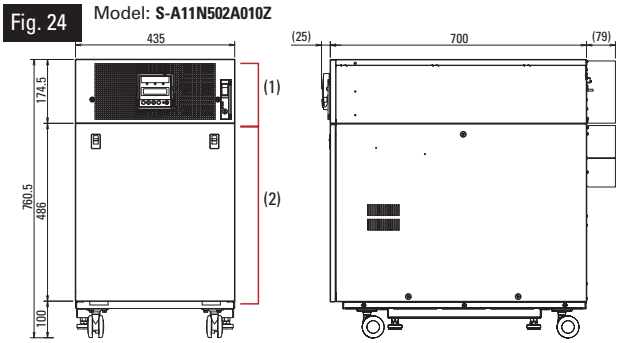
(2) PDU - Rear View



Paint color: Black (Munsell N1.5)

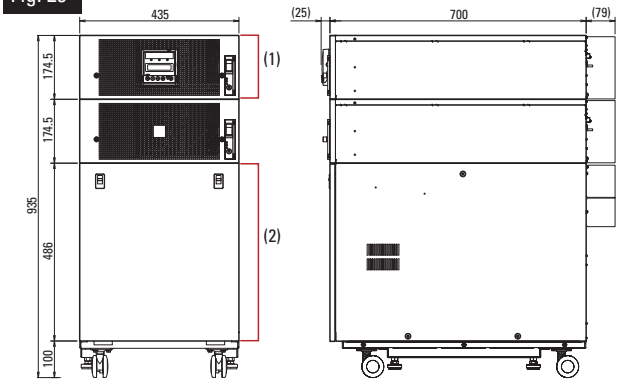
Dimensions (Unit: mm)

Fig. 24 Model: **S-A11N502A010Z**



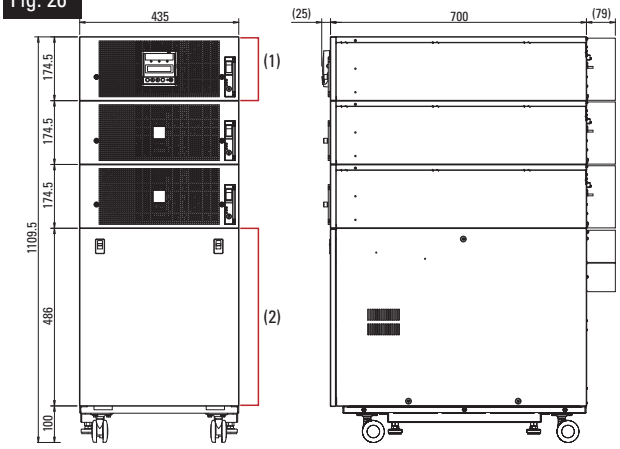
Mass: 290 kg

Fig. 25 Model: **S-A11N103A010Z**



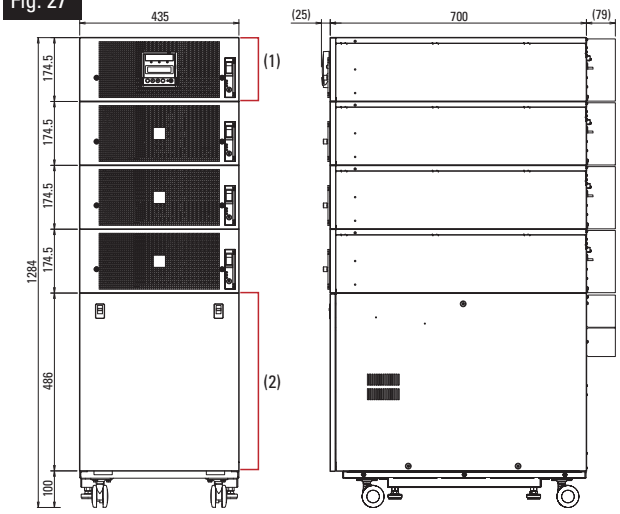
Mass: 370 kg

Fig. 26 Model: **S-A11N153A010Z**



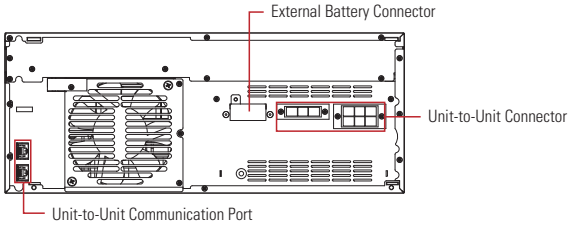
Mass: 450 kg

Fig. 27 Model: **S-A11N203A010Z**

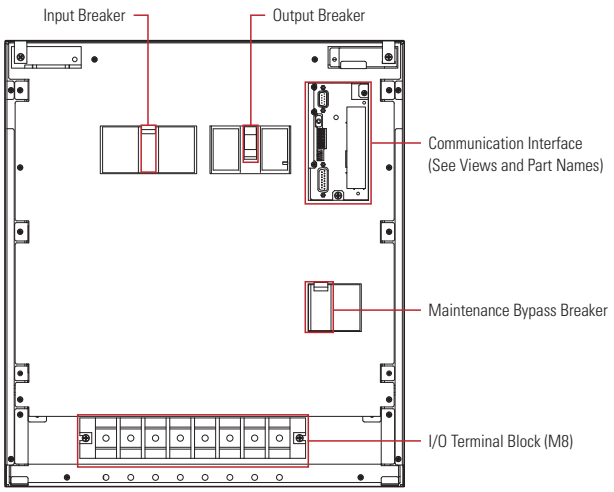


Mass: 530 kg

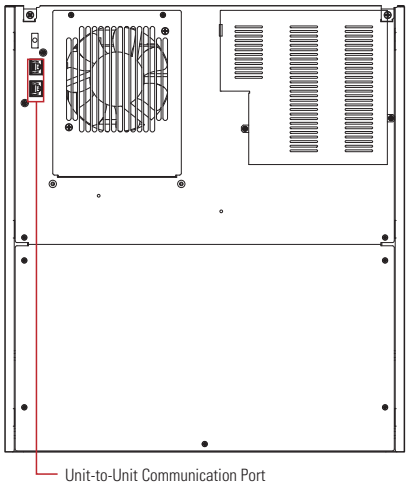
(1) UPS Unit - Rear View



(2) PDU - Front Interior View



(2) PDU - Rear View



Paint color: Black (Munsell N1.5)

Dimensions (Unit: mm)

Output capacity 5 kVA **Battery backup time 30 min**

Order no.		S-A11N502A030T	S-A11N502A030N	S-A11N502A030S2	S-A11N502A030W1	S-A11N502A030W2	S-A11N502A030Z
Input voltage		200 V			100/200 V	200 V	
Output voltage		200 V			100 V or 100/200 V	100 V or 100/200 V	
Battery	Quantity	16 pcs (12 V per battery)	16 pcs (12 V per battery)	16 pcs (12 V per battery)	16 pcs (12 V per battery)	16 pcs (12 V per battery)	16 pcs (12 V per battery)
	Total capacity [Wh]	5376	5376	5376	5376	5376	5376
Dimensions		Fig. 28 (Fig. 1 + Fig. 73)	Fig. 28 (Fig. 1 + Fig. 73)	Fig. 29 (Fig. 4 + Fig. 73)	Fig. 30 (Fig. 12 + Fig. 73)	Fig. 30 (Fig. 16 + Fig. 73)	Fig. 31 (Fig. 20 + Fig. 73)
	W	440+(100)+130	440+(100)+130	440+(100)+435	440+(200)+435	440+(200)+435	440+(200)+435
	D(1)	700+(25)+(40)	700+(25)+(40)	700+(25)+(79)	700+(25)+(79)	700+(25)+(79)	700+(25)+(79)
	H	544	544	544	544	544	716
Mass(2)		243 kg	243 kg	290 kg	375 kg	350 kg	450 kg

Battery backup time 60 min

Order no.		S-A11N502A060T	S-A11N502A060N	S-A11N502A060S2	S-A11N502A060W1	S-A11N502A060W2	S-A11N502A060Z
Input voltage		200 V			100/200 V	200 V	
Output voltage		200 V			100 V or 100/200 V	100 V or 100/200 V	
Battery	Quantity	16 pcs (12 V per battery)	16 pcs (12 V per battery)	16 pcs (12 V per battery)	16 pcs (12 V per battery)	16 pcs (12 V per battery)	16 pcs (12 V per battery)
	Total capacity [Wh]	8448	8448	8448	8448	8448	8448
Dimensions		Fig. 28 (Fig. 1 + Fig. 74)	Fig. 28 (Fig. 1 + Fig. 74)	Fig. 29 (Fig. 4 + Fig. 74)	Fig. 30 (Fig. 12 + Fig. 74)	Fig. 30 (Fig. 16 + Fig. 74)	Fig. 31 (Fig. 20 + Fig. 74)
	W	440+(100)+130	440+(100)+130	440+(100)+435	440+(200)+435	440+(200)+435	440+(200)+435
	D(1)	870+(12)	870+(12)	870+(12)	870+(12)	870+(12)	870+(12)
	H	544	544	544	544	544	716
Mass(2)		348 kg	348 kg	395 kg	480 kg	455 kg	555 kg

Fig. 28

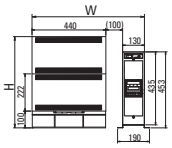


Fig. 29

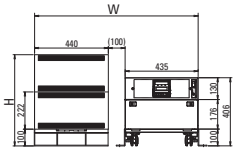


Fig. 30

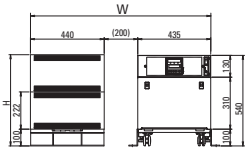
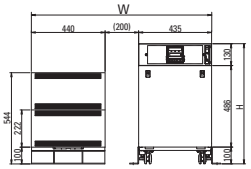


Fig. 31



Battery backup time 180 min

Order no.		S-A11N502A180T	S-A11N502A180N	S-A11N502A180S2	S-A11N502A180W1	S-A11N502A180W2	S-A11N502A180Z
Input voltage		200 V			100/200 V	200 V	
Output voltage		200 V			100 V or 100/200 V	100 V or 100/200 V	
Battery	Quantity	32 pcs (12 V per battery)	32 pcs (12 V per battery)	32 pcs (12 V per battery)	32 pcs (12 V per battery)	32 pcs (12 V per battery)	32 pcs (12 V per battery)
	Total capacity [Wh]	16896	16896	16896	16896	16896	16896
Dimensions		Fig. 32 (Fig. 1 + Fig. 76)	Fig. 32 (Fig. 1 + Fig. 76)	Fig. 33 (Fig. 4 + Fig. 76)	Fig. 34 (Fig. 12 + Fig. 76)	Fig. 34 (Fig. 16 + Fig. 76)	Fig. 35 (Fig. 20 + Fig. 76)
	W	440+(100)+130	440+(100)+130	440+(100)+435	440+(200)+435	440+(200)+435	440+(200)+435
	D(1)	870+(12)	870+(12)	870+(12)	870+(12)	870+(12)	870+(12)
	H	988	988	988	988	988	988
Mass(2)		648 kg	648 kg	695 kg	780 kg	755 kg	855 kg

Fig. 32

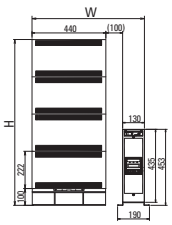


Fig. 33

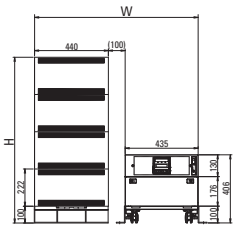


Fig. 34

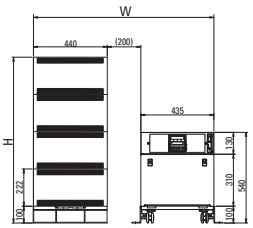
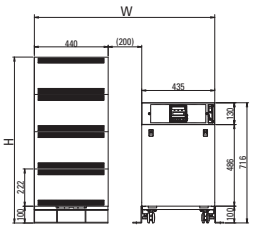


Fig. 35



(1)The sum of the depths of: a UPS unit (or PDU), cable cover, terminal block, and protrusions
(2)The sum of the masses of: a UPS unit, PDU, and battery

Paint color: Black (Munsell N1.5)

Dimensions (Unit: mm)

Output capacity 10 kVA **Battery backup time 30 min**

Order no.		S-A11N103A030T	S-A11N103A030S2	S-A11N103A030W1	S-A11N103A030W2	S-A11N103A030Z
Input voltage		200 V		100/200 V	200 V	
Output voltage		200 V		100 V or 100/200 V	100 V or 100/200 V	
Battery	Quantity	32 pcs (12 V per battery)	32 pcs (12 V per battery)	32 pcs (12 V per battery)	32 pcs (12 V per battery)	32 pcs (12 V per battery)
	Total capacity [Wh]	10752	10752	10752	10752	10752
Dimensions		Fig. 36 (Fig. 2 + Fig. 75)	Fig. 37 (Fig. 5 + Fig. 75)	Fig. 38 (Fig. 14 + Fig. 75)	Fig. 38 (Fig. 18 + Fig. 75)	Fig. 39 (Fig. 21 + Fig. 75)
	W	440+(100)+130×2	440+(100)+435	440+(200)+435	440+(200)+435	440+(200)+435
	D(1)	700+(25)+(105)	700+(25)+(79)	700+(25)+(79)	700+(25)+(79)	700+(25)+(79)
	H	988	988	988	988	988
Mass(2)		472 kg	515 kg	645 kg	600 kg	675 kg

Battery backup time 60 min

Order no.		S-A11N103A060T	S-A11N103A060S2	S-A11N103A060W1	S-A11N103A060W2	S-A11N103A060Z
Input voltage		200 V		100/200 V	200 V	
Output voltage		200 V		100 V or 100/200 V	100 V or 100/200 V	
Battery	Quantity	32 pcs (12 V per battery)	32 pcs (12 V per battery)	32 pcs (12 V per battery)	32 pcs (12 V per battery)	32 pcs (12 V per battery)
	Total capacity [Wh]	16896	16896	16896	16896	16896
Dimensions		Fig. 36 (Fig. 2 + Fig. 76)	Fig. 37 (Fig. 5 + Fig. 76)	Fig. 38 (Fig. 14 + Fig. 76)	Fig. 38 (Fig. 18 + Fig. 76)	Fig. 39 (Fig. 21 + Fig. 76)
	W	440+(100)+130×2	400+(100)+435	440+(200)+435	440+(200)+435	440+(200)+435
	D(1)	870+(12)	870+(12)	870+(12)	870+(12)	870+(12)
	H	988	988	988	988	988
Mass(2)		677 kg	720 kg	850 kg	805 kg	880 kg

Fig. 36

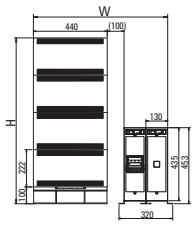


Fig. 37

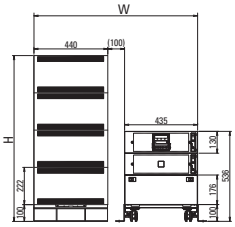


Fig. 38

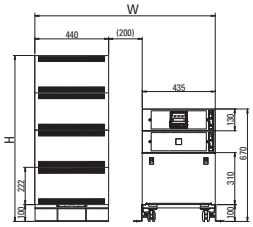
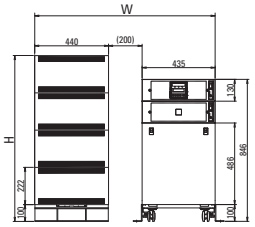


Fig. 39



Battery backup time 180 min

Order no.		S-A11N103A180T	S-A11N103A180S2	S-A11N103A180W1	S-A11N103A180W2	S-A11N103A180Z
Input voltage		200 V		100/200 V	200 V	
Output voltage		200 V		100 V or 100/200 V	100 V or 100/200 V	
Battery	Quantity	64 pcs (12 V per battery)	64 pcs (12 V per battery)	64 pcs (12 V per battery)	64 pcs (12 V per battery)	64 pcs (12 V per battery)
	Total capacity [Wh]	33792	33792	33792	33792	33792
Dimensions		Fig. 40 (Fig. 2 + Fig. 76 ×2)	Fig. 41 (Fig. 5 + Fig. 76 ×2)	Fig. 42 (Fig. 14 + Fig. 76 ×2)	Fig. 42 (Fig. 18 + Fig. 76 ×2)	Fig. 43 (Fig. 21 + Fig. 76 ×2)
	W	440×2+(100)+130×2	440×2+(100)+435	440×2+(200)+435	440×2+(200)+435	440×2+(200)+435
	D(1)	870+(12)	870+(12)	870+(12)	870+(12)	870+(12)
	H	988	988	988	988	988
Mass(2)		1297 kg	1340 kg	1470 kg	1425 kg	1500 kg

Fig. 40

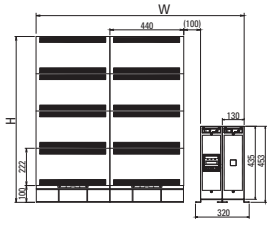


Fig. 41

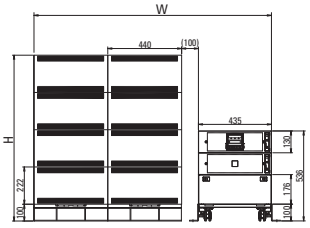


Fig. 42

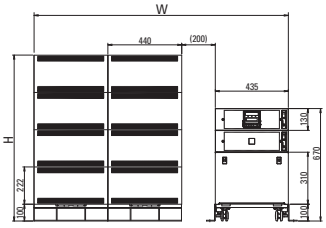
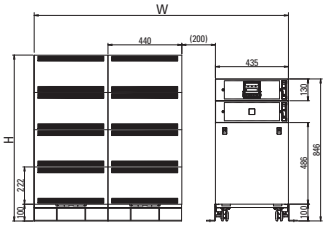


Fig. 43



(1) The sum of the depths of: a UPS unit (or PDU), cable cover, terminal block, and protrusions
(2) The sum of the masses of: a UPS unit, PDU, and battery

Paint color: Black (Munsell N1.5)

Dimensions (Unit: mm)

Output capacity 15 kVA **Battery backup time 30/60/180 min**

Order no.		S-A11N153A030S2	S-A11N153A030Z	S-A11N153A060S2	S-A11N153A060Z	S-A11N153A180S2	S-A11N153A180Z
Input voltage		200 V					
Output voltage		200 V	100 V or 100/200 V	200 V	100 V or 100/200 V	200 V	100 V or 100/200 V
Battery	Backup time	30 min		60 min		180 min	
	Quantity	48 pcs (12 V per battery)	48 pcs (12 V per battery)	48 pcs (12 V per battery)	48 pcs (12 V per battery)	96 pcs (12 V per battery)	96 pcs (12 V per battery)
	Total capacity [Wh]	16128	16128	25344	25344	50688	50688
Dimensions		Fig. 44 (Fig. 6 + Fig. 73 + Fig. 75)	Fig. 45 (Fig. 22 + Fig. 73 + Fig. 75)	Fig. 46 (Fig. 6 + Fig. 74 + Fig. 76)	Fig. 47 (Fig. 22 + Fig. 74 + Fig. 76)	Fig. 48 (Fig. 6 + Fig. 76 ×3)	Fig. 49 (Fig. 22 + Fig. 76 ×3)
	W	440×2+(100)+435	440×2+(100)+435	440×2+(100)+435	440×2+(200)+435	440×3+(100)+435	440×3+(200)+435
	D(1)	700+(25)+(79)	700+(25)+(79)	870+(12)	870+(12)	870+(12)	870+(12)
	H	988	988	988	988	988	988
Mass(2)		755 kg	915 kg	1065 kg	1225 kg	1985 kg	2145 kg

Fig. 44

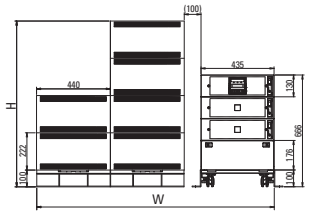


Fig. 45

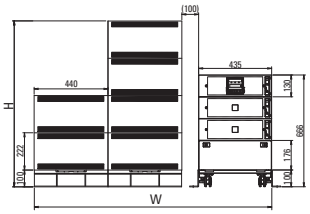


Fig. 46

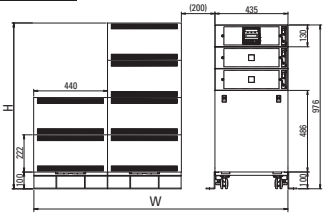


Fig. 47

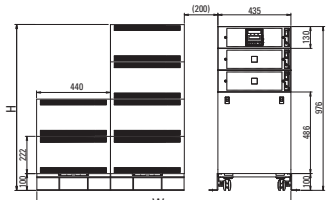


Fig. 48

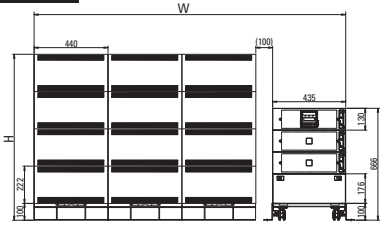
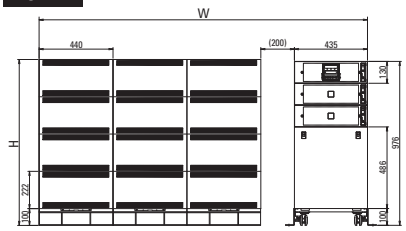


Fig. 49



Output capacity 20 kVA **Battery backup time 30/60/180 min**

Order no.		S-A11N203A030S2	S-A11N203A030Z	S-A11N203A060S2	S-A11N203A060Z	S-A11N203A180S2	S-A11N203A180Z
Input voltage		200 V					
Output voltage		200 V	100 V or 100/200 V	200 V	100 V or 100/200 V	200 V	100 V or 100/200 V
Battery	Backup time	30 min		60 min		180 min	
	Quantity	64 pcs (12 V per battery)	64 pcs (12 V per battery)	64 pcs (12 V per battery)	64 pcs (12 V per battery)	128 pcs (12 V per battery)	128 pcs (12 V per battery)
	Total capacity [Wh]	21504	21504	33792	33792	67584	67584
Dimensions		Fig. 50 (Fig. 7 + Fig. 75 ×2)	Fig. 51 (Fig. 23 + Fig. 75 ×2)	Fig. 52 (Fig. 7 + Fig. 76 ×2)	Fig. 53 (Fig. 23 + Fig. 76 ×2)	Fig. 54 (Fig. 7 + Fig. 76 ×4)	Fig. 55 (Fig. 23 + Fig. 76 ×4)
	W	440×2+(100)+435	440×2+(200)+435	440×2+(100)+435	440×2+(200)+435	440×4+(100)+435	440×4+(200)+435
	D(1)	700+(25+79)	700+(25+79)	870+(12)	870+(12)	870+(12)	870+(12)
	H	988	1106	988	1106	988	1106
Mass(2)		980 kg	1140 kg	1390 kg	1550 kg	2630 kg	2790 kg

Fig. 50

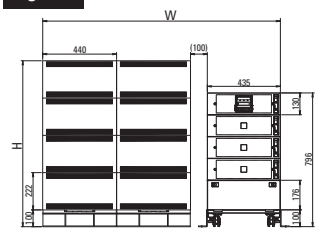


Fig. 51

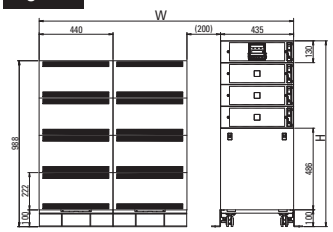


Fig. 52

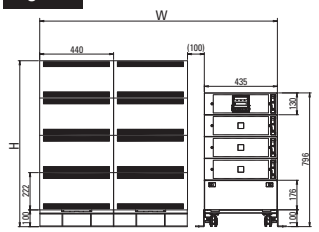


Fig. 53

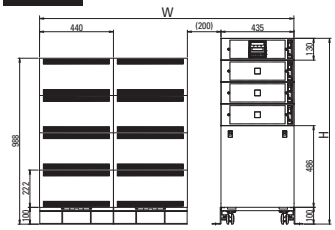


Fig. 54

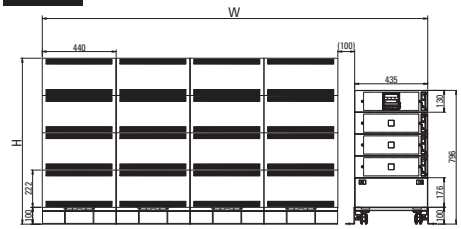
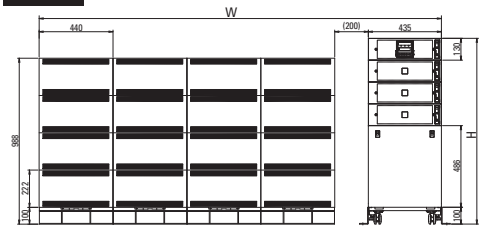


Fig. 55



(1)The sum of the depths of: a UPS unit (or PDU), cable cover, terminal block, and protrusions
(2)The sum of the masses of: a UPS unit, PDU, and battery

Paint color: Black (Munsell N1.5)

Dimensions (Unit: mm)

Output capacity 5 kVA **Battery backup time 15/25/35/45 min** Free-standing (vertical) type

Order no.		S-A11N502A015T S-A11N502A015N	S-A11N502A025T S-A11N502A025N	S-A11N502A035T S-A11N502A035N	S-A11N502A045T S-A11N502A045N
Input voltage		200 V			
Output voltage		200 V			
Battery	Backup time	15 min	25 min	35 min	45 min
	Quantity	32 pcs (12 V per battery)	48 pcs (12 V per battery)	64 pcs (12 V per battery)	80 pcs (12 V per battery)
	Total capacity [Wh]	2400	3600	4800	6000
Dimensions		Fig. 56 (Fig. 1 + Fig. 77)	Fig. 56 (Fig. 1 + Fig. 77)	Fig. 57 (Fig. 1 + Fig. 77 ×2)	Fig. 57 (Fig. 1 + Fig. 77 ×2)
	W	130×2	130×2	130×3	130×3
	D(1)	700+(25)+(79)	700+(25)+(79)	700+(25)+(79)	700+(25)+(79)
	H	453	453	453	453
Mass(2)		112 kg	147 kg	196 kg	231 kg

Fig. 56

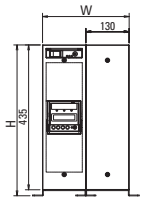
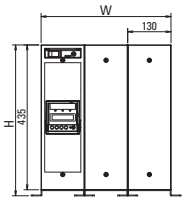


Fig. 57



Output capacity 10 kVA **Battery backup time 15/25/35 min** Free-standing (vertical) type

Order no.		S-A11N103A015T	S-A11N103A025T	S-A11N103A035T
Input voltage		200 V		
Output voltage		200 V		
Battery	Backup time	15 min	25 min	35 min
	Quantity	64 pcs (12 V per battery)	96 pcs (12 V per battery)	128 pcs (12 V per battery)
	Total capacity [Wh]	4800	7200	9600
Dimensions		Fig. 58 (Fig. 2 + Fig. 77)	Fig. 59 (Fig. 2 + Fig. 77 ×2)	Fig. 60 (Fig. 2 + Fig. 77 ×4)
	W	130×3	130×4	130×6
	D(1)	700+(25)+(105)	700+(25)+(105)	700+(25)+(105)
	H	453	453	453
Mass(2)		211 kg	295 kg	393 kg

Fig. 58

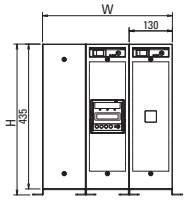


Fig. 59

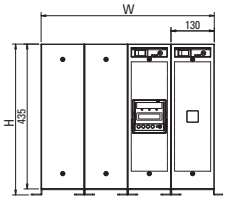
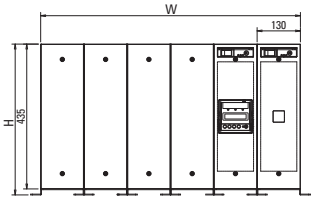


Fig. 60



(1) The sum of the depths of: a UPS unit (or PDU), cable cover, terminal block, and protrusions
(2) The sum of the masses of: a UPS unit, PDU, and battery

Paint color: Black (Munsell N1.5)

Dimensions (Unit: mm)

Output capacity 5 kVA **Battery backup time 15/25/35/45 min** Rack mount type

Order no.		S-A11N502A015TRM S-A11N502A015NRM	S-A11N502A025TRM S-A11N502A025NRM	S-A11N502A035TRM S-A11N502A035NRM	S-A11N502A045TRM S-A11N502A045NRM
Input voltage		200 V			
Output voltage		200 V			
Battery	Backup time	15 min	25 min	35 min	45 min
	Quantity	32 pcs (12 V per battery)	48 pcs (12 V per battery)	64 pcs (12 V per battery)	80 pcs (12 V per battery)
	Total capacity [Wh]	2400	3600	4800	6000
Dimensions		Fig. 61 (Fig. 1 + Fig. 77)	Fig. 61 (Fig. 1 + Fig. 77)	Fig. 62 (Fig. 1 + Fig. 77 ×2)	Fig. 62 (Fig. 1 + Fig. 77 ×2)
	W	435	435	435	435
	D(1)	700+(25)+(79)	700+(25)+(79)	700+(25)+(79)	700+(25)+(79)
	H	6U	6U	9U	9U
Mass(2)		112 kg	147 kg	196 kg	231 kg

Order no.		S-A11N502A015S2RM	S-A11N502A025S2RM	S-A11N502A035S2RM	S-A11N502A045S2RM
Input voltage		200 V			
Output voltage		200 V			
Battery	Backup time	15 min	25 min	35 min	45 min
	Quantity	32 pcs (12 V per battery)	48 pcs (12 V per battery)	64 pcs (12 V per battery)	80 pcs (12 V per battery)
	Total capacity [Wh]	2400	3600	4800	6000
Dimensions		Fig. 63 (Fig. 4 + Fig. 77)	Fig. 63 (Fig. 4 + Fig. 77)	Fig. 64 (Fig. 4 + Fig. 77 ×2)	Fig. 64 (Fig. 4 + Fig. 77 ×2)
	W	435	435	435	435
	D(1)	700+(25)+(79)	700+(25)+(79)	700+(25)+(79)	700+(25)+(79)
	H	10 U	10 U	13 U	13 U
Mass(2)		144 kg	179 kg	228 kg	263 kg

Fig. 61

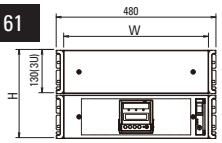


Fig. 62

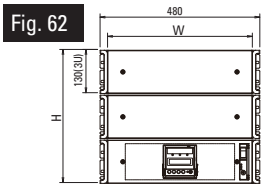


Fig. 63

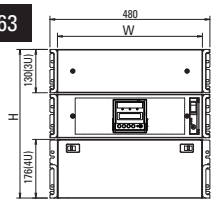
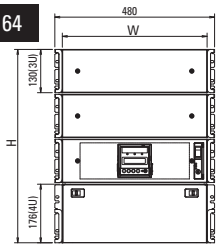


Fig. 64



Output capacity 10 kVA **Battery backup time 15/25/35 min** Rack mount type

Order no.		S-A11N103A015TRM	S-A11N103A015S2RM	S-A11N103A025TRM	S-A11N103A025S2RM	S-A11N103A035TRM	S-A11N103A035S2RM
Input voltage		200 V					
Output voltage		200 V					
Battery	Backup time	15 min		25 min		35 min	
	Quantity	64 pcs (12 V per battery)	64 pcs (12 V per battery)	96 pcs (12 V per battery)	96 pcs (12 V per battery)	128 pcs (12 V per battery)	128 pcs (12 V per battery)
	Total capacity [Wh]	4800	4800	7200	7200	9600	9600
Dimensions		Fig. 65 (Fig. 2 + Fig. 77)	Fig. 66 (Fig. 5 + Fig. 77)	Fig. 67 (Fig. 2 + Fig. 77 ×2)	Fig. 68 (Fig. 5 + Fig. 77 ×2)	Fig. 69 (Fig. 2 + Fig. 77 ×4)	Fig. 70 (Fig. 5 + Fig. 77 ×4)
	W	435	435	435	435	435	435
	D(1)	700+(105)+(25)	700 +(25)+(79)	700+(105)+(25)	700 +(25)+(79)	700+(105)+(25)	700 +(25)+(79)
	H	9 U	13 U	12 U	16 U	18 U	22 U
Mass(2)		211 kg	242 kg	295 kg	326 kg	393 kg	424 kg

Fig. 65

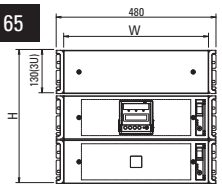


Fig. 66

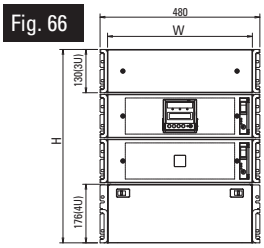


Fig. 67

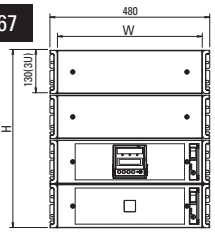


Fig. 68

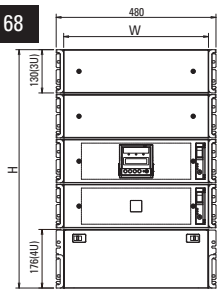


Fig. 69

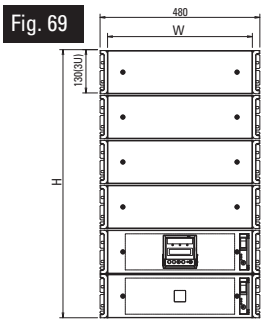
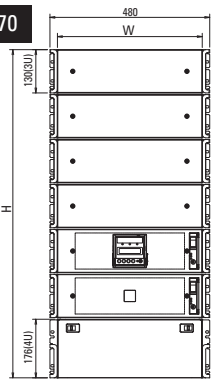


Fig. 70



(1)The sum of the depths of: a UPS unit (or PDU), cable cover, terminal block, and protrusions
(2)The sum of the masses of: a UPS unit, PDU, and battery

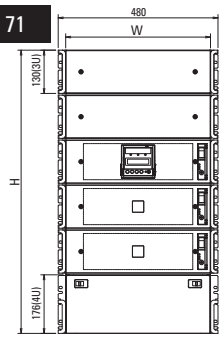
Paint color: Black (Munsell N1.5)

Dimensions (Unit: mm)

Output capacity 15 kVA **Battery backup time 15 min** Rack mount type

Order no.		**S-A11N153A015S2RM**
Input voltage		200 V
Output voltage		200 V
Battery	Backup time	15 min
	Quantity	96 pcs (12 V per battery)
	Total capacity [Wh]	7200
Dimensions		Fig. 71 (Fig. 6 + Fig. 77 ×2)
	W	435
	D(1)	700+(25)+(79)
	H	19U
Mass(2)		354kg

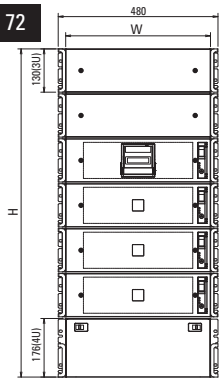
Fig. 71



Output capacity 20 kVA **Battery backup time 15 min** Rack mount type

Order no.		**S-A11N203A015S2RM**
Input voltage		200 V
Output voltage		200 V
Battery	Backup time	15 min
	Quantity	128 pcs (12 V per battery)
	Total capacity [Wh]	9600
Dimensions		Fig. 72 (Fig. 7 + Fig. 77 ×2)
	W	435
	D(1)	700 +(25)+(79)
	H	22 U
Mass(2)		452 kg

Fig. 72



(1) The sum of the depths of: a UPS unit (or PDU), cable cover, terminal block, and protrusions
(2) The sum of the masses of: a UPS unit, PDU, and battery

Paint color: Black (Munsell N1.5)

Battery Dimensions (Unit: mm)

Battery panel

Fig. 73

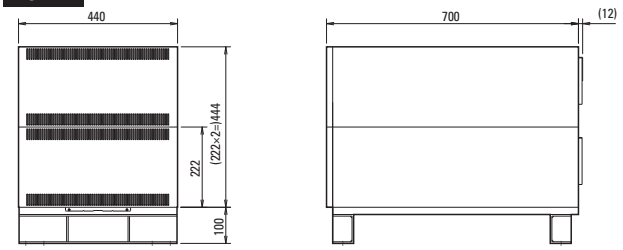


Fig. 74

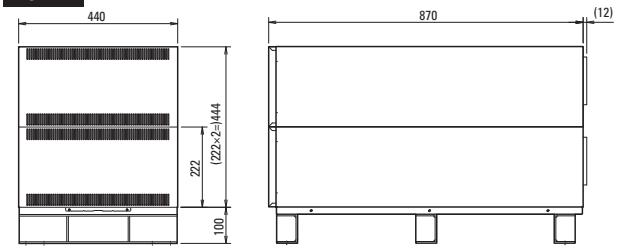


Fig. 75

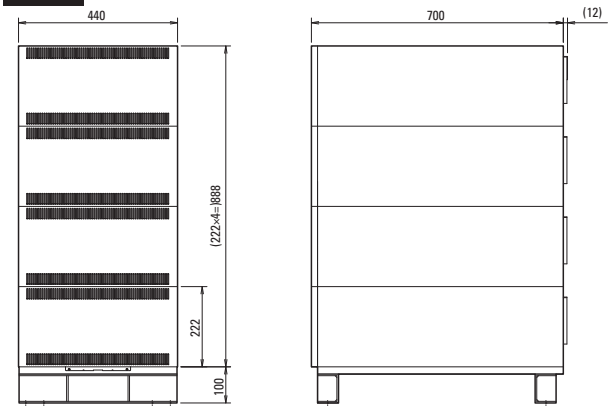
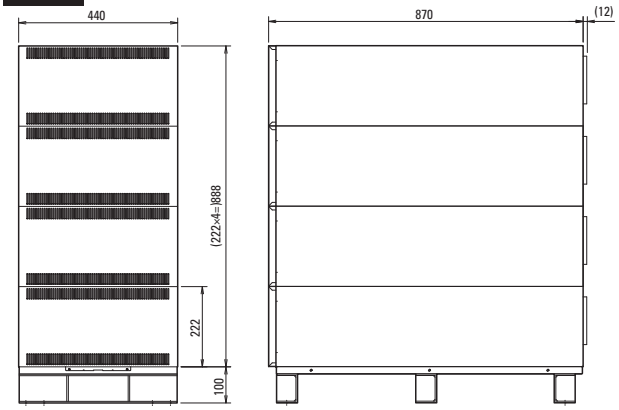
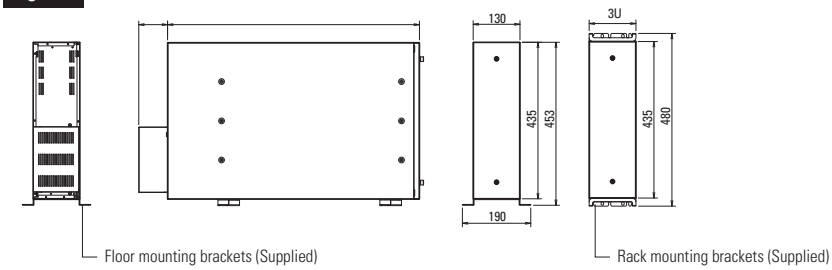


Fig. 76



Battery box

Fig. 77



Paint color: Black (Munsell N1.5)

Network Options

Items		Model no.	Description
LAN interface card		**PRLANIF031**	When installed in the optional card slot, 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.
SANUPS SOFTWARE for download	Windows version	**PMS52□00DL**(2)	SANUPS SOFTWARE is used to shut down multiple servers (up to 50 servers including serial-connected servers) over a network from a single UPS-connected server with a USB cable. The software is not necessary when using the LAN interface card PRLANIF031. For the latest OS support information, refer to our website. For bulk purchase of software licenses, append an appropriate -suffix to the model number as on the right.. **-10** (10 licenses) **-50** (50 licenses) **-100** (100 licenses)
	Multi-OS version(1)	**PMS53□00DL**(2)	

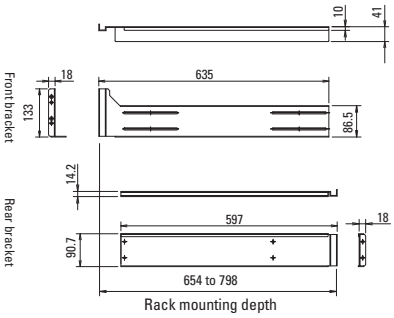
(1) Supports Windows, Unix, and Linux.
(2) The □'s denote revision characters.
Note: Option products have different operating temperature ranges from the UPS.

Dimensions (Unit: mm)

Rack support rails

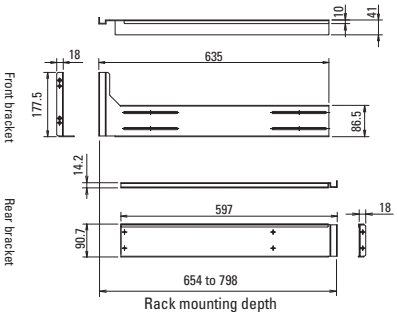
Used for mounting the UPS on a standard EIA 19-inch rack.
(A pair of left and right rails. The figures below are for the left one.)

RM027-US (3U)



Mass: Approx. 2.6 kg (5.2 kg for the left and right pair)

RM028-US (4U)



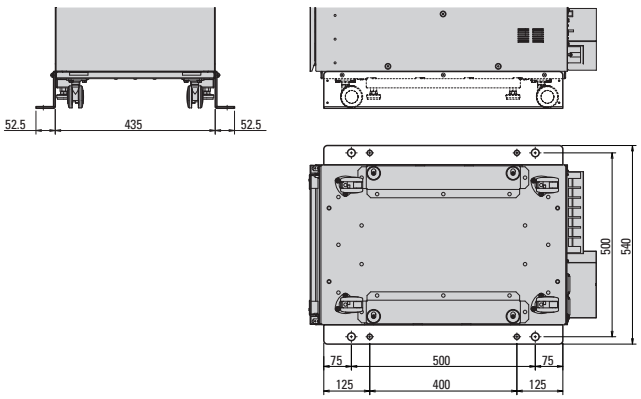
Mass: Approx. 2.7 kg (5.4 kg for the left and right pair)

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

Floor mounting brackets

Used for mounting the UPS to the floor.
(A pair of left and right rails. The figures below are common to both.)

FMA11NA00

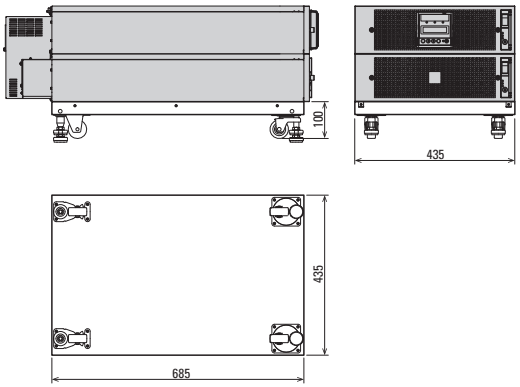


Mass: Approx. 3.5 kg (7 kg for the left and right pair)

Casterbase

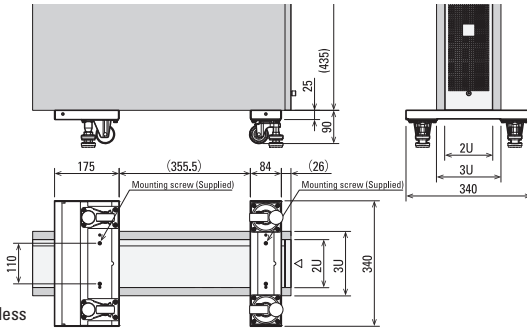
Used to move a UPS. Can be secured with floor-mounting brackets.

CBA11NA00



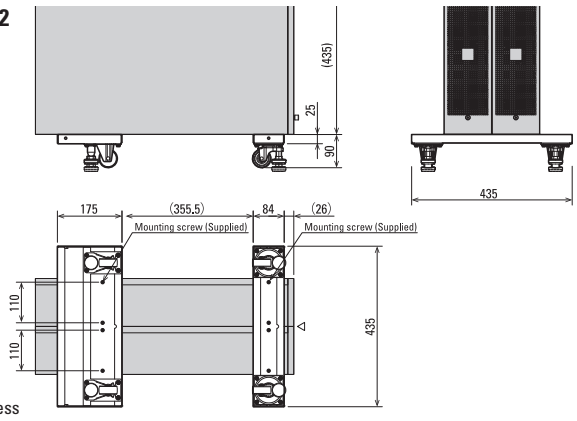
Mass: 11 kg or less

CBA11NA01



Mass: 5 kg or less

CBA11NA02



Mass: 6 kg or less

Specifications

UL/CE certified models **Output capacity 5 kVA, 10 kVA**

Order no.				A11N502U0TM	A11N103U0TM
UL-registered no. (Model)				A11N502U0T	A11N103U0T
Rated output capacity (apparent power / active power)		Single-unit/Parallel operation (N config.)		5 kVA / 4.5 kW	10 kVA / 9 kW
		Parallel redundant operation (N+1 config.)		—	5 kVA / 4.5 kW
Technology		Topology		Double conversion online	
		Cooling system		Forced air cooling	
		Inverter		High-frequency PWM	
AC input	No. of phases/wires			Single-phase 2-wire	
	Rated voltage			200/208/220/230/240 V (Same as output voltage)	
	Voltage range[1]			Within -40% to +15% of rated voltage	
	Rated frequency			50/60 Hz (Auto-sensing or fixed-frequency mode selectable.[2] Factory setting: auto-sensing)	
	Required capacity		N config.	5.5 kVA or less	11 kVA or less
			N+1 config.	—	6.2 kVA or less
	Input power factor			0.95 or greater (at rated input voltage, input voltage harmonic distortion < 1%)	
AC output	No. of phases/wires			Single-phase 2-wire	
	Rated voltage			200/208/220/230/240 V (Selectable. Factory setting: 200 V)	
	Voltage regulation			Within ±2% of rated voltage	
	Rated frequency			50/60 Hz (Same as input frequency)	
	Frequency regulation[2]	In grid operation		Within ±1/3/5% of rated frequency (Factory setting: ±3%)	
		At free run (asynchronous)		Within ±0.5% of rated frequency	
	Voltage waveform			Sinusoidal	
	Voltage harmonic distortion	At linear load		3% or less (At rated output)	
		At rectifier load		7% or less (At rated output)	
	Load power factor	Rated		0.9 lagging (Variation range: 0.7 lagging to 1.0)	
	Transient voltage fluctuation	Abrupt load change		Within ±5% of rated voltage (For 10⇔100% abrupt change)	
		Loss/return of input power		Within ±5% of rated voltage	
		Abrupt input voltage change		Within ±5% of rated voltage (For ±10% abrupt change)	
	Overcurrent protection		N config.	110% or more (Automatic transfer to bypass circuit[3] if exceeded)	
			N+1 config.	—	220% or more (Automatic transfer to bypass circuit[3] if exceeded)
	Overload capability	Inverter	N config.	110% (for 1 min), 118% (instantly)	
			N+1 config.	—	220% (for 1 min), 236% (instantly)
		Bypass	N config.	200% (for 30 s), 800% (for 2 cycles)	
			N+1 config.	—	400% (for 30 s), 1600% (for 2 cycles)
Battery	Type			Small-sized valve-regulated lead-acid (VRLA) battery	
	Backup time			5 min (At 25°C ambient temperature and load power factor of 0.9, using new, fully charged batteries)	
	Quantity			16 pcs (12 V per battery)	32 pcs (12 V per battery)
	Rated capacity			6 Ah per battery	
	Expected service life			5 years (At a 25°C average ambient temperature. For reference purposes only.)	
Acoustic noise (1 m from front of UPS, A-weighted)		Excluding start of charging		45 dB or less	50 dB or less
		At start of charging		51 dB or less	53 dB or less
Heat dissipation (at rated output after fully charged)				287 W	574 W
Input leakage current				5 mA or less	18 mA or less
I/O connector, wire gauge, etc.[4]		Input connector		Field wiring connection	Field wiring connection
		Input wire		8 mm²	14 or 22 mm²
		Output connector		Field wiring connection	Field wiring connection
		Output wire		8 mm²	14 or 22 mm²
		Grounding wire		5.5 mm²	14 or 22 mm²
		Input distribution board breaker capacity		50 A	100 A
Operating environment				Temperature: 0 to +40°C, humidity: 10 to 90% RH (non-condensing)	
Storage environment[5]				Temperature: -15 to +50°C, humidity: 10 to 90% RH (non-condensing)	
Expected service life (of the UPS unit excluding battery)				10 years (At a 30°C average ambient temperature. For reference purposes only.)	
EMC standard				EN 62040-2:2018 C2, EN 55032:2015, EN 55035:2017, FCC Part 15 Subpart B Class A, VCCI 32-1 Class A	
Safety standard				UL 1778 5th edition (E226092), CSA C22.2 No. 107.3-14 (3rd edition), CE marking (EN 62040-1:Ed. 2:2017)	
Separate options					
Rack support rails[6]				RM027-US (1 pair)	RM027-US (2 pairs)
Caster base [7]				CBA11NA00/CBA11NA01	CBA11NA00/CBA11NA02
Air filter kit[8]				FLA11NA00 (1 pc)	FLA11NA00 (2 pcs)

(1) AC input voltage range changes depending on the load level. The input voltage range is within -40% to +15% of the rated value at load levels ≤ 70%, or within -20% to +15% of the rated value at load levels > 70%.

(2) At the auto-sensing setting, the frequency synchronizing range can be set to ±1, ±3, or ±5%. At the auto-sensing setting, the input frequency range is within ±8% of the rated frequency. Also, for the inverter to start running, the input frequency must be within the set synchronizing frequency range. When fixed-frequency setting is selected, output frequency is fixed to either 50 Hz or 60 Hz regardless of input frequency. At the fixed-frequency setting, the input frequency range is 40 to 120 Hz.

(3) Uninterrupted transfer to bypass operation is only possible when all of the following conditions are true: the automatic frequency detection setting is selected, the input frequency is within the synchronizing range, and the input voltage is within the allowable range.

(4) Communications:
a. Dry contact signal: D-sub 15-pin female, with M3 fixing screws
b. PC port: USB Type C
c. Remote control: One-touch terminal block, compatible wire size: 24 to 16 AWG

(5) Avoid use or storage in 30°C or higher temperatures for extended periods of time, or the battery life will shorten. If a UPS is to be stored for a long period, it will be necessary to recharge batteries once every two to six months.

(6) Used for mounting a UPS unit and battery unit on an EIA standard 19-inch rack. Prior to purchase, check that the rails are mountable to your 19-inch rack.

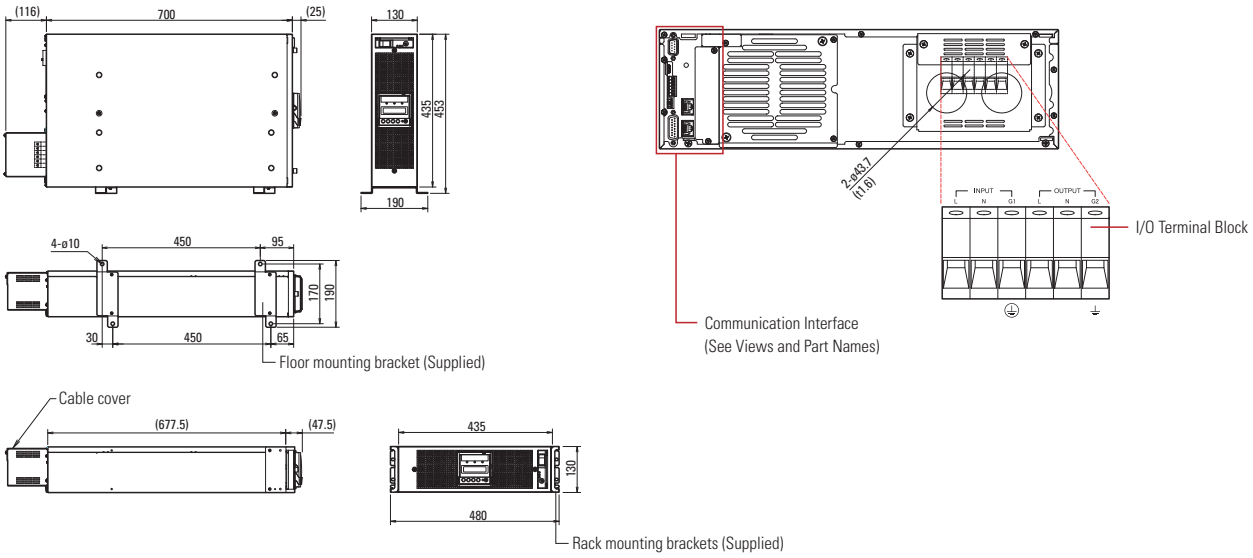
(7) Used to move a UPS. Can be secured with floor-mounting brackets. The caster base is not UL-certified.

(8) A front side air intake filter for preventing dust ingress.

Note: Output power is supplied from the inverter at start-up. (Inverter start-up type)

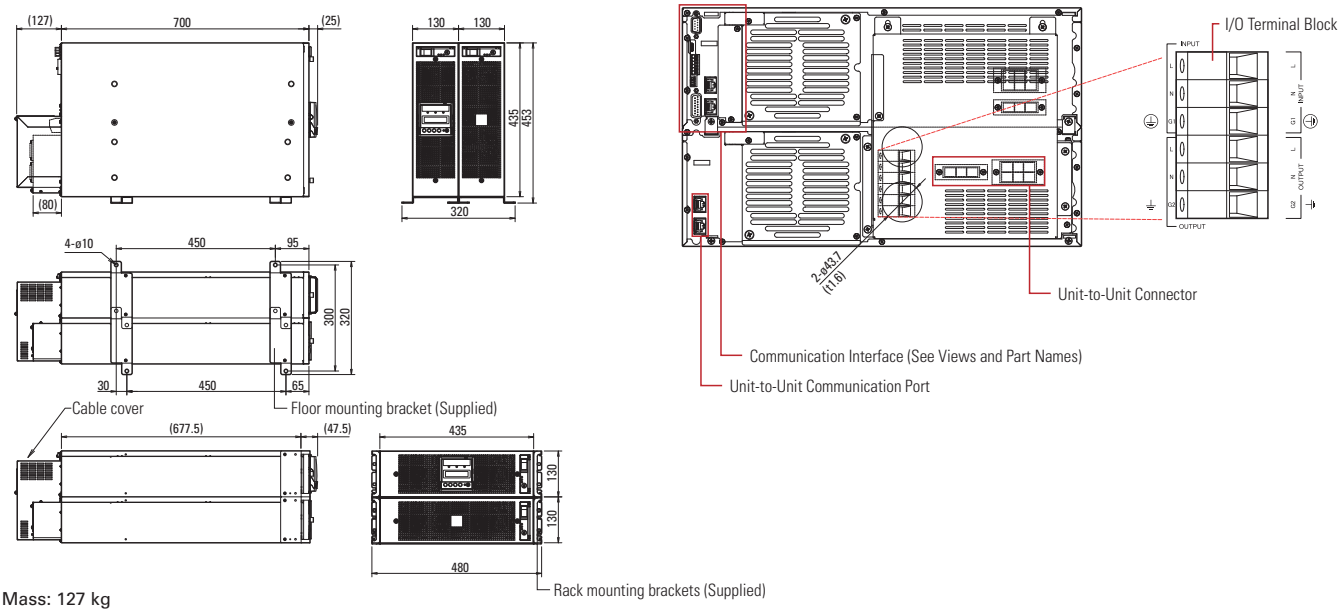
Dimensions (Unit: mm)

Model: **A11N502U0TM**



Mass: 63 kg

Model: **A11N103U0TM**



Mass: 127 kg

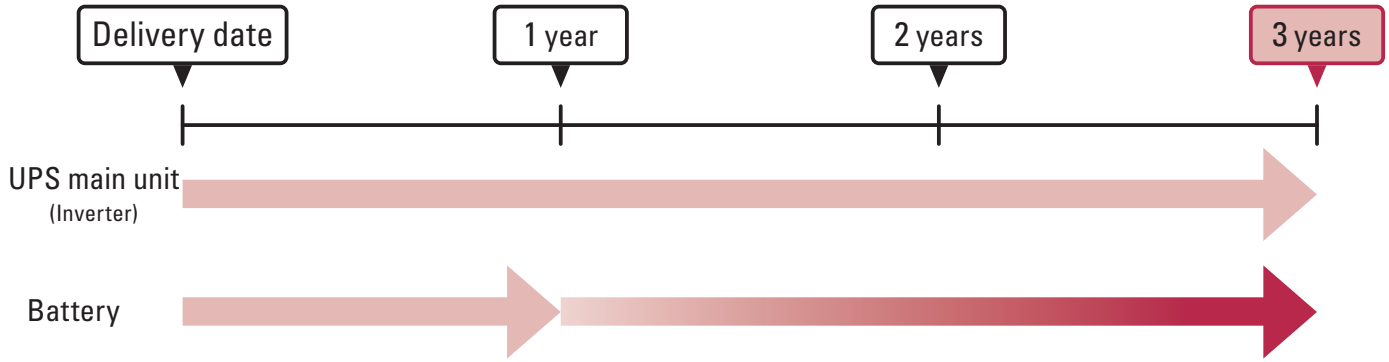
Paint color: Black (Munsell N1.5)

MEMO

MEMO

UPS warranty period

For warranty details, see the Warranty Card included with your UPS.



Battery warranty period is one year. It can be extended to three years by registering the UPS.

Note: There are conditions to meet for these benefits. See the detailed information on our website.

Complete registration on our website:

https://www.sanyodenki.com/

ECO PRODUCTS

■ Eco Products

Eco Products are eco-friendly products designed to reduce the environmental impact of the product and its packaging materials compared to our existing products and conventional products on the market.
Our products are assessed over the product's life cycle against our own eco-design requirements including product size, weight, power consumption, and CO_2 emissions, and those meeting our standards and higher standards qualify as Eco Products and Eco Products Plus, respectively.

● Fire Service Law and Fire Prevention Ordinance in Japan
• When installing battery storage systems (including lithium-ion batteries), applicable local fire prevention regulations apply. Systems exceeding 20 kWh require notification to the local fire department.
(If multiple systems are installed in the same room, total capacity is calculated as the sum of all systems.)
For details, contact your local fire department.
• Products designed for use in Japan may not be suitable for use overseas due to differences in voltage and operating conditions, which may result in smoke or fire. Consult us before use outside Japan.
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.
- Consult us when using the motor for the following uses, as these require special considerations for installation, operations, maintenance, and management such as redundancy and emergency power generators.
  (a) Medical equipment and other equipment that are related directly to human life.
  (b) Trains or elevators that can cause bodily harm.
  (c) Socially and publicly important computer systems.
  (d) And other equipment related to safety of human life or that can cause severe effects 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.
- Refrain from modifying or processing the product 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.
- Products containing lithium-ion batteries may be restricted from air transport. When transporting by sea, transportation must be carried out according to the International Maritime Dangerous Goods (IMDG) Code. Also, some countries and regions have their own regulations, so please consult with the shipping company in advance.

For any inquiry or consultation, please contact a SANYO DENKI sales representative.
The Instruction Manual and Technical Manual are available for download from our website.
https://products.sanyodenki.com/en/sanups-manuals/

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