SANYO DENKI

SANUPS A11K-Li

Lithium-ion Battery UPS

Ver.5
English

SANUPS A11K-Li

Double Conversion Online UPS with Lithium-ion Batteries

UPS unit
3-year warranty

Lineup:

[No. of phases/wires] Input/Output voltage	Output capacity [kVA]	Output capacity [kW]	Battery backup time: Load power factor 0.8	Battery backup time: Load power factor 0.7	I/O connection	UL certification	Order no.	Page: Specifications	Page: Dimensions
[Single-phase 2-wire] 100 V model 100/110/120 V	1	0.8	13 min	15 min	Outlet	—	S-A11KL102B0013SSN00(1)	p.5	p.8
						✓	S-A11KL102C0013UJ(1)	p.10	p.11
	1.5	1.2	8 min	10 min	Outlet	—	S-A11KL152B0008SSN00(1)	p.5	p.8
						✓	S-A11KL152C0008UJ(1)	p.10	p.11
			19 min	20 min		—	S-A11KL152B0019SSN00(1)	p.5	p.8
			100 min	110 min		—	S-A11KL152B0100TSN00(1)	p.13	p.14
			200 min	220 min		—	S-A11KL152B0200TSN00□□(2)		
			300 min	330 min		—	S-A11KL152B0300TSN00□□(2)		
			400 min	440 min		—	S-A11KL152B0400TSN00□□(2)		
			500 min	550 min		—	S-A11KL152B0500TSN00	p.13	p.15
			600 min	660 min		—	S-A11KL152B0600TSN00		
	2	1.6	15 min	16 min	Outlet/terminal block	—	S-A11KL202B0015SS□00(1)	p.5	p.8
	3	2.4	9 min	10 min	Outlet/terminal block	—	S-A11KL302B0009SS□00(1)	p.7	p.9
			19 min	20 min		—	S-A11KL302B0019SS□00(1)		
			50 min	55 min		—	S-A11KL302B0050TS□00(1)	p.13	pp.16, 18
			100 min	110 min		—	S-A11KL302B0100TS□00□□(2)		
			150 min	165 min		—	S-A11KL302B0150TS□00□□(2)		
			200 min	220 min		—	S-A11KL302B0200TS□00□□(2)		
			250 min	275 min		—	S-A11KL302B0250TS□00	p.13	pp.17, 19
			300 min	330 min		—	S-A11KL302B0300TS□00		
	5	4	11 min	12 min	Terminal block	—	S-A11KL502B0011SST00(1)	p.7	p.9
			30 min	32 min		—	S-A11KL502B0030TST00(1)	p.13	p.20
			60 min	64 min		—	S-A11KL502B0060TST00□□(2)		
			90 min	96 min		—	S-A11KL502B0090TST00□□(2)		
			120 min	128 min		—	S-A11KL502B0120TST00□□(2)	p.13	p.21
			150 min	160 min		—	S-A11KL502B0150TST00		
			180 min	192 min		—	S-A11KL502B0180TST00		

(1) Vertical (free-standing)/rack-mount convertible (2) Free-standing or rack-mount type can be selected.

Installation examples

Mountable in an EIA standard 19-inch rack

Rack support rails are optional.

Vertical installation

You can change the orientation of the LCD panel.
Refer to the specifications for installation accessories such as vertical stands and floor mounting brackets.

Wide Operating Temperature Range

- The A11K-Li achieves an operating temperature range as wide as -20 to +55°C. It can be used with confidence even in harsh cold or hot environments.

Space-Saving

- The volume of the 30-minute backup model is about half of our conventional products,(1) and it can be installed in a smaller space.

Reduced Maintenance Work

- Our conventional UPSs(1) using lead-acid batteries require battery replacement about every 5 years.
- Thanks to Li-ion batteries, this UPS doesn't require battery replacement for 10 years.(2) Thus, the cost of battery replacement can be reduced.

(1) Conventional UPS: A11K (with lead-acid batteries)
(2) At 30°C ambient temperature

Wide Input Range

- Its input voltage ranges from -40% to +20% of the rated voltage when the load level is less than 70%.
- Battery drain can be minimized even in unstable power environments.

Compatible with High Power Factor Loads

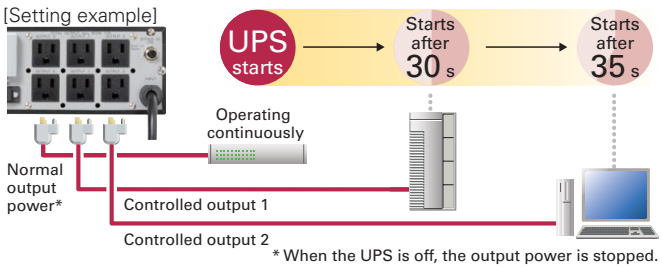
- With a 0.8 load power factor, the A11K-Li is capable of providing its power to loads with a high power factor.

Output capacity 1.5 kVA → 1.2 kW

Easy and Reliable Sequential System Start and Stop

- The timing of power on and shutdown of hard drives or servers can be easily scheduled. (This only applies to models with a backup time of 19 minutes or less)

Settings can be done with an outlet box; it comes built-in for 1 and 1.5 kVA models, and optional for 2 and 3 kVA models.



* When the UPS is off, the output power is stopped.

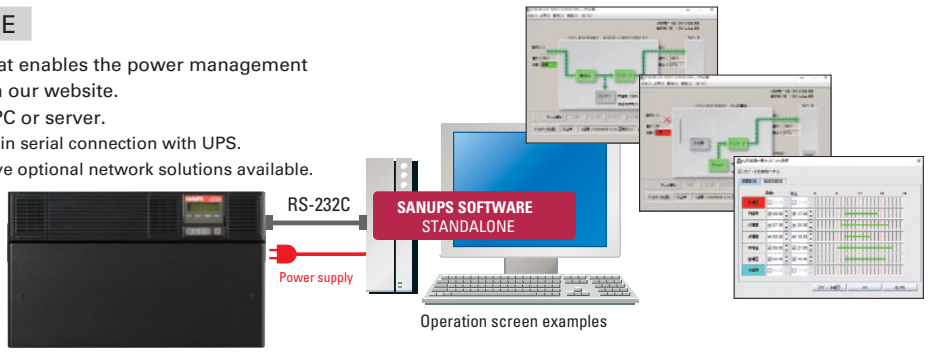
Easy Maintenance

- An inverter module is removable from the front of a UPS unit for easy maintenance.
- Its built-in maintenance bypass circuit allows maintenance to be performed while maintaining inverter power supply.

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.
Note: 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



Operation screen examples

Battery Cold Start Function

Batteries can start up the UPS even when grid AC power is not available, enabling inverter operation.
With this function enabled, the UPS can be used as an emergency power supply in the event of a natural disaster or emergency.
Note that the function is disabled by default.

Views and Part Names

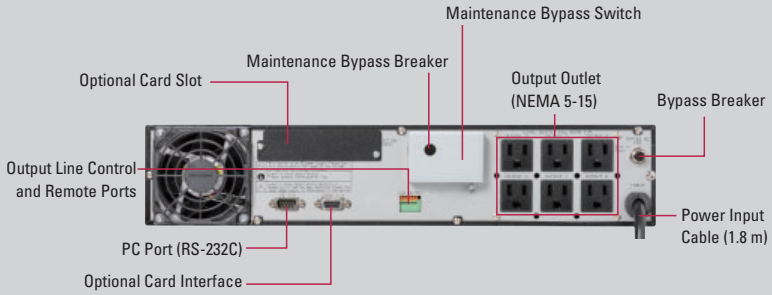
LCD Panel

Sliding Button Cover Opened (slides up/down)

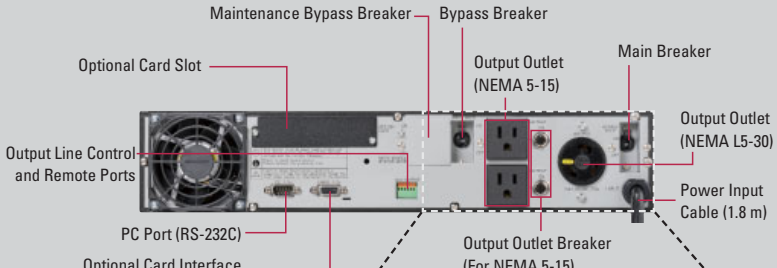
1, 1.5, 2 kVA, Front View

8 to 19 min
Battery backup time

1, 1.5 kVA, Rear View



2 kVA, Rear View



2 kVA Terminal Block Type, Rear View

Model: S-A11KL202B0015SST00

Note: The photos above may look different from the actual products in the printed text, etc.

Specifications

Output capacity **1** to **2** kVA　Battery backup time **8** to **19** min

Order no.			S-A11KL102B0013SSN00	S-A11KL152B0008SSN00	S-A11KL152B0019SSN00	S-A11KL202B0015SS□00
Rated output capacity (apparent power / active power)			1 kVA / 0.8 kW	1.5 kVA / 1.2 kW		2 kVA / 1.6 kW
Technology	Topology		Double conversion online			
	Rectifier		High power factor converter			
	Cooling method		Forced air cooling			
	Inverter		High-frequency PWM			
AC input	No. of phases/wires		Single-phase 2-wire(1)			
	Rated voltage		100/110/120 V (Same as output voltage)			
	Voltage range		At load level < 70%: Within -40 to +20% of rated voltage (-40% becomes -20% for recovery voltage)			
			At load level ≥ 70%: Within ± 20% of rated voltage			
	Rated frequency		50/60 Hz (auto-sensing(2))			
	Frequency range		Within ± 1, 3, 5, or 7% of rated frequency (same as output frequency regulation)			
	Required capacity(3)		1.1 kVA	1.5 kVA		2.0 kVA
	Input power factor		0.95 or greater	0.95 or greater		0.97 or greater
AC output	No. of phases/wires		Single-phase 2-wire			
	Rated voltage		100/110/120 V (User-selectable. Factory setting: 100 V)			
	Rated current		10 A	15 A		20 A
	Voltage regulation		Within ± 2% of rated voltage (at rated output)			
	Rated frequency		50/60 Hz (Same as the input rated frequency)			
	Frequency regulation	During grid operation	Within ± 1, 3, 5, or 7% of the rated frequency (User-selectable. Factory setting: ± 3%)			
		During battery operation	Within ± 0.5% of rated frequency			
	Output waveform		Pure sine wave			
	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	0.8 lagging (Variation range: 0.7 lagging to 1.0)			
	Transient voltage fluctuation	For abrupt load change	Within ± 5% of rated voltage (For 0 ⇔ 100% load step changes at rated input)			
		For loss or return of input power	Within ± 5% of rated voltage (At rated output)			
		For abrupt input voltage change	Within ± 5% of rated voltage (For ± 10% abrupt change)			
	Overcurrent protection		Automatic transfer to bypass (With automatic retransfer function)			
	Overload capability	Inverter	105% (for 200 ms)			
		Bypass	200% (for 30 s), 800% (for 2 cycles)			
	Output Line Control		Yes			An optional outlet box is required
Battery	Type		Lithium-ion battery			
	Battery backup time(4)	Initial value	13 min (15 min)	8 min (10 min)	19 min (20 min)	15 min (16 min)
		After 10 years(5)	11 min (12 min)	6 min (8 min)	16 min (17 min)	12 min (13 min)
	Battery self-test		Settings possible (Factory setting: "disabled")			
Interface	PC port		RS-232C			
	Remote port		Remote ON/OFF switch (can control up to 5 UPS units in Linked Operation using a dedicated connection cable)			
	Auxiliary port		Output Line Control contact(6)			
	Dry contact		Optional dry contact interface card is required			
	Network support		Optional LAN interface card is required			
Acoustic noise	During normal operation		41 dB	45 dB		45 dB
	During battery operation or at a temperature above 40°C		51 dB	51 dB		51 dB
Heat dissipation (At rated operation, after battery charging completed)			82 W	127 W		153 W
Input leakage current			3 mA	3 mA		3 mA
Operating environment			Ambient temperature: -20 to +55°C,(7) humidity: 10 to 90% RH (non-condensing)			
Storage environment(8)			Temperature: -20 to +55°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			
Separate options						
Outlet box(9)			—			P10030B (outlet type), P10035B (terminal block type)
Rack support rails(10)			RM030-US (2U)			
Floor mounting brackets(11)			FMA11KA00			
Caster base(12)			CBA11KA01			
Air filter kit(13)			FL008-3			

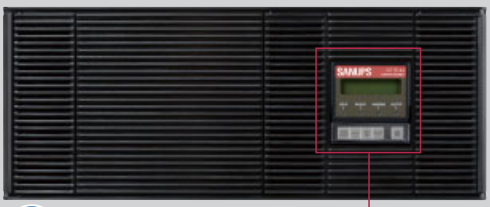
(1) If single-wire grounding the AC input and output, set the input/output ground phase according to the UPS specification. The W (N) terminal of AC input (S phase) and the W (N) terminal of AC output (V phase) are to be grounded.
(2) The inverter synchronizes operation with AC input and allows uninterrupted transfer through a bypass circuit provided that the AC input frequency is within a range of the rated frequency ±3% (1, 3, 5, or 7% selectable) and the AC input voltage is within the rated voltage ±20% (if the load level is less than 70%: between -40% and +20%).
(3) Max. capacity during battery recovery charging
(4) At 25°C ambient temperature and load power factor of 0.8, using new, fully charged batteries. In parentheses are values at 0.7 load power factor.
(5) Assuming 10 power outages per year
(6) For 2 kVA models, settings can be done with an optional outlet box.
(7) When the battery temperature exceeds 55°C, battery charging will stop and a Device Error (minor malfunction) will be generated to warn the faulty battery temperature.
(8) Avoid use or storage in 30°C or higher temperatures for extended periods of time, or the battery's life will be shortened. If a UPS is to be stored for a long period, it will be necessary to recharge batteries once every six months.
(9) Enables Output Line Control, the coordinated on/off management of UPS outlets. "Output 0" is normal output; "Output 1 (and 2)" is controlled output.
Note that its operating temperature range is different from that of the UPS.
(10) Used for mounting the UPS on a standard 19-inch rack. Prior to purchase, check that the rails are mountable to your 19-inch rack.
(11) Used to secure a free-standing type UPS to the floor.
(12) Used to carry a vertically-installed UPS.
(13) A front side air intake filter for preventing dust ingress.

Views and Part Names

LCD Panel

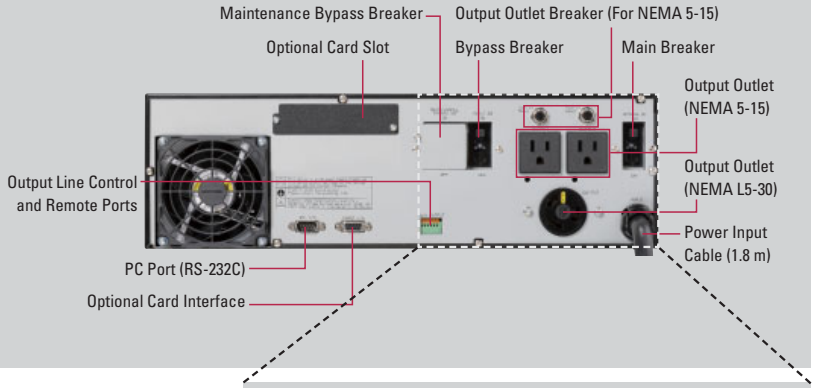
Sliding Button Cover Opened (slides up/down)

3 kVA, Front View



3 kVA, Rear View

Model: S-A11KL302B0009SSN00

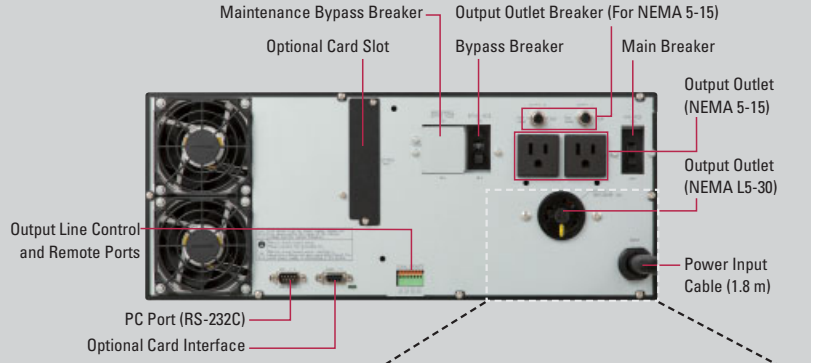


Terminal Block Type, Rear View

Model: S-A11KL302B0009SST00

3 kVA, Rear View

Model: S-A11KL302B0019SSN00

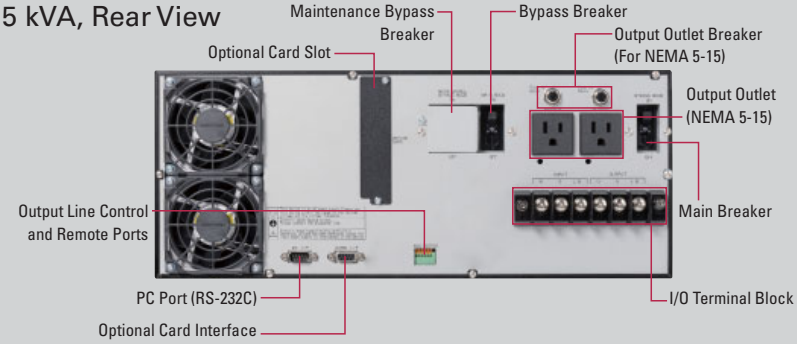


Terminal Block Type, Rear View

Model: S-A11KL302B0019SST00

5 kVA, Front View

5 kVA, Rear View



Note: The photos above may look different from the actual products in the printed text, etc.

Specifications

Output capacity **3 kVA, 5 kVA** Battery backup time **10 to 19 min**

Order no.			S-A11KL302B0009SS□00	S-A11KL302B0019SS□00	S-A11KL502B0011SST00
Rated output capacity (apparent power / active power)			3 kVA / 2.4 kW		5 kVA / 4 kW
Technology	Topology		Double conversion online		
	Rectifier		High power factor converter		
	Cooling method		Forced air cooling		
	Inverter		High-frequency PWM		
AC input	No. of phases/wires		Single-phase 2-wire(1)		
	Rated voltage		100/110/120 V (Same as output voltage)		
	Voltage range		At load level < 70%: Within -40 to +20% of rated voltage (-40% becomes -20% for recovery voltage)		
			At load level ≥ 70%: Within ±20% of rated voltage		
	Rated frequency		50/60 Hz (auto-sensing(2))		
	Frequency range		Within ±1, 3, 5, or 7% of rated frequency (same as output frequency regulation)		
	Required capacity(3)		3.0 kVA		5.3 kVA
	Input power factor		0.97 or greater		0.97 or greater
AC output	No. of phases/wires		Single-phase 2-wire		
	Rated voltage		100/110/120 V (User-selectable. Factory setting: 100 V)		
	Rated current		30 A		50 A
	Voltage regulation		Within ±2% of rated voltage (at rated output)		
	Rated frequency		50/60 Hz (Same as the input rated frequency)		
	Frequency regulation	During grid operation	Within ±1, 3, 5, or 7% of the rated frequency (User-selectable. Factory setting: ±3%)		
		During battery operation	Within ±0.5% of rated frequency		
	Output waveform		Pure sine wave		
	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	0.8 lagging (Variation range: 0.7 lagging to 1.0)		
	Transient voltage fluctuation	For abrupt load change	Within ±5% of rated voltage (For 0⇔100% load step changes at rated input)		
		For loss or return of input power	Within ±5% of rated voltage (At rated output)		
		For abrupt input voltage change	Within ±5% of rated voltage (For ±10% abrupt change)		
	Overcurrent protection		Automatic transfer to bypass (With automatic retransfer function)		
	Overload capability	Inverter	105% (for 200 ms)		
		Bypass	200% (for 30 s), 800% (for 2 cycles)		
	Output Line Control		An optional outlet box is required		Contact us
Battery	Type		Lithium-ion battery		
	Battery backup time(4)	Initial value	9 min (10 min)	19 min (20 min)	11 min (12 min)
		After 10 years(5)	6 min (8 min)	16 min (17 min)	9 min (10 min)
	Battery self-test		Settings possible (Factory setting: "disabled")		
Interface	PC port		RS-232C		
	Remote port		Remote ON/OFF switch (can control up to 5 UPS units in Linked Operation using a dedicated connection cable)		
	Auxiliary port		Output Line Control contact(6)		
	Dry contact		Optional dry contact interface card is required		
	Network support		Optional LAN interface card is required		
Acoustic noise	During normal operation		46 dB		46 dB
	During battery operation or at a temperature above 40°C		55 dB		55 dB
Heat dissipation (At rated operation, after battery charging completed)			254 W		421 W
Input leakage current			3.5 mA		3.5 mA
Operating environment			Ambient temperature: -20 to +55°C,(7) humidity: 10 to 90% RH (non-condensing)		
Storage environment(8)			Ambient temperature: -20 to +55°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		
Separate options					
Outlet box(9)			P10030B (outlet type), P10035B (terminal block type)		—
Rack support rails(10)			RM027-US (3U)	RM028-US (4U)	
Floor mounting brackets(11)			—		
Caster base(12)			CBA11KA01	CBA11KA02	
Air filter kit(13)			FL009-3	FL010-3	

(1) If single-wire grounding the AC input and output, set the input/output ground phase according to the UPS specification. The W (N) terminal of AC input (S phase) and the W (N) terminal of AC output (V phase) are to be grounded.
(2) The inverter synchronizes operation with AC input and allows uninterrupted transfer through a bypass circuit provided that the AC input frequency is within a range of the rated frequency ±3% (1, 3, 5, or 7% selectable) and the AC input voltage is within the rated voltage ±20% (if the load level is less than 70%: between -40% and +20%).
(3) Max. capacity during battery recovery charging
(4) At 25°C ambient temperature and load power factor of 0.8, using new, fully charged batteries. In parentheses are values at 0.7 load power factor.
(5) Assuming 10 power outages per year
(6) For 3 kVA models, settings can be done with an optional outlet box.
(7) When the battery temperature exceeds 55°C, battery charging will stop and a Device Error (minor malfunction) will be generated to warn the faulty battery temperature.
(8) Avoid use or storage in 30°C or higher temperatures for extended periods of time, or the battery's life will be shortened. If a UPS is to be stored for a long period, it will be necessary to recharge batteries once every six months.
(9) Enables Output Line Control, the coordinated on/off management of UPS outlets. "Output 0" is normal output; "Output 1 (and 2)" is controlled output.
Note that its operating temperature range is different from that of the UPS.
(10) Used for mounting the UPS on a standard 19-inch rack. Prior to purchase, check that the rails are mountable to your 19-inch rack.
(11) Used to secure a free-standing type UPS to the floor.
(12) Used to carry a vertically-installed UPS.
(13) A front side air intake filter for preventing dust ingress.

Dimensions

Output capacity 1 to 2 kVA

Order no.[1]	Outlet type	S-A11KL102B0013SSN00	S-A11KL152B0008SSN00	S-A11KL152B0019SSN00	S-A11KL202B0015SSN00
	Terminal block type	—	—	—	S-A11KL202B0015SST00
Rated output capacity (apparent power / active power)		1 kVA / 0.8 kW	1.5 kVA / 1.2 kW	1.5 kVA / 1.2 kW	2 kVA / 1.6 kW
Battery backup time[2]		13 min (15 min)	8 min (10 min)	19 min (20 min)	15 min (16 min)
Battery capacity [Ah·cell]		84	84	180	180
Battery power consumption [Wh]		310	310	666	666
Input plug		NEMA 5-15P	NEMA 5-15P	NEMA 5-15P	NEMA L5-30P or M5 terminal
Output outlet		NEMA 5-15R × 6	NEMA 5-15R × 6	NEMA 5-15R × 6	NEMA L5-30R × 1 or M5 terminal NEMA 5-15R × 2 (15 A each)
Acoustic noise	During normal operation	41 dB	45 dB	45 dB	45 dB
	During battery operation or at a temperature above 40°C	51 dB	51 dB	51 dB	51 dB
Heat dissipation (At rated operation, after battery charging completed)		82 W	127 W	127 W	153 W
Input leakage current		3 mA	3 mA	3 mA	3 mA
Operating environment		Ambient temperature: -20 to +55°C,[3] humidity: 10 to 90% RH (non-condensing)			
Dimensions[4] (Unit: mm)					
Drawing		Fig. 1	Fig. 1	Fig. 1	Fig. 1
W		435	435	435	435
H		86 (2U)	86 (2U)	86 (2U)	86 (2U)
D		440	488	625	625
Mass		17 kg	18 kg	27 kg	27 kg

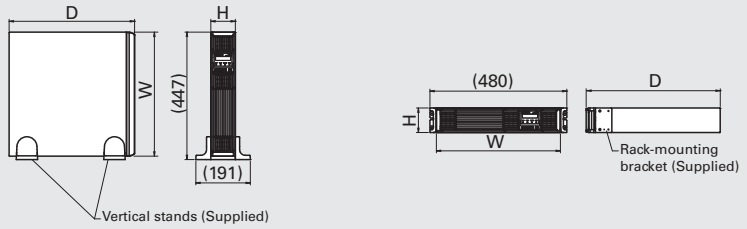
(1) Vertical/rack-mount convertible

(2) At a 25°C ambient temperature, 0.8 load power factor, using new, fully charged batteries. The values in parentheses are the values at a load power factor of 0.7.

(3) When the battery temperature exceeds 55°C, battery charging will stop and a Device Error (minor malfunction) will be generated to warn the faulty battery temperature.

(4) Dimensions do not include protruding objects like screws.

Fig. 1



Paint color: Black (Munsell N1.5)

Input plug shape

NEMA 5-15P | NEMA L5-30P

Output outlet shape

NEMA 5-15R | NEMA L5-30R

Output capacity **3 kVA, 5 kVA**

Order no.(1)	Outlet type	S-A11KL302B0009SSN00	S-A11KL302B0019SSN00	—
	Terminal block type	S-A11KL302B0009SST00	S-A11KL302B0019SST00	S-A11KL502B0011SST00
Rated output capacity (apparent power / active power)		3 kVA / 2.4 kW	3 kVA / 2.4 kW	5 kVA / 4 kW
Battery backup time(2)		9 min (10 min)	19 min (20 min)	11 min (12 min)
Battery capacity [Ah-cell]		180	360	360
Battery power consumption [Wh]		666	1332	1332
Input plug		NEMA L5-30P or M5 terminal	NEMA L5-30P or M5 terminal	M5 terminal
Output outlet		NEMA L5-30R × 1 or M5 terminal NEMA 5-15R × 2 (15 A each)	NEMA L5-30R × 1 or M5 terminal NEMA 5-15R × 2 (15 A each)	M5 terminal NEMA 5-15R × 2 (15 A each)
Acoustic noise	During normal operation	46 dB	46 dB	46 dB
	During battery operation or at a temperature above 40°C	55 dB	55 dB	55 dB
Heat dissipation (At rated operation, after battery charging completed)		254 W	254 W	421 W
Input leakage current		3.5 mA	3.5 mA	3.5 mA
Operating environment		Ambient temperature: -20 to +55°C,(3) humidity: 10 to 90% RH (non-condensing)		
Dimensions(4) (Unit: mm)				
Drawing		Fig. 2	Fig. 3	Fig. 3
W		435	435	435
H		131 (3U)	175 (4U)	175 (4U)
D		625	690	690
Mass		32 kg	47 kg	49 kg

(1) Vertical/rack-mount convertible
(2) At 25°C ambient temperature and load power factor of 0.8, using new, fully charged batteries. In parentheses are values at 0.7 load power factor.
(3) When the battery temperature exceeds 55°C, battery charging will stop and a Device Error (minor malfunction) will be generated to warn the faulty battery temperature.
(4) Dimensions do not include protruding objects like screws.

Fig. 2

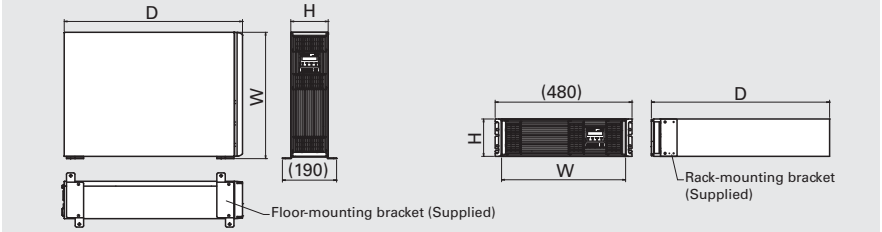
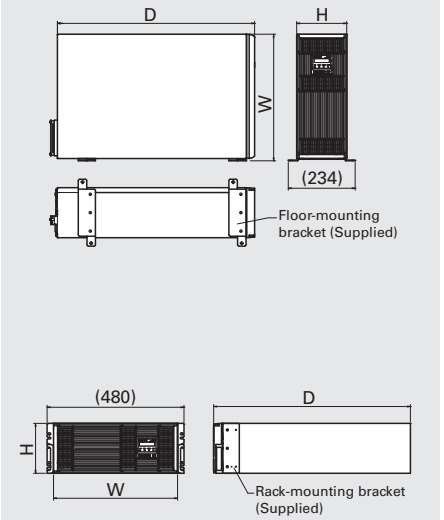


Fig. 3



Paint color: Black (Munsell N1.5)

■ Input plug shape

NEMA L5-30P	

■ Output outlet shape

NEMA 5-15R		NEMA L5-30R	

Specifications

UL certified models | Output capacity **1 kVA, 1.5 kVA**

Order no.			**S-A11KL102C0013UJ**	**S-A11KL152C0008UJ**
UL-registered no.			A11KL102U001J	A11KL152U001J
Rated output capacity (apparent power / active power)			1 kVA / 0.8 kW	At 100 V setting: 1.25 kVA / 1.0 kW At 110 V setting: 1.375 kVA / 1.1 kW At 120 V setting: 1.5 kVA / 1.2 kW
Technology	Topology		Double conversion online	
	Rectifier		High power factor converter	
	Cooling method		Forced air cooling	
	Inverter		High-frequency PWM	
AC input	No. of phases/wires		Single-phase 2-wire(1)	
	Rated voltage		100/110/120 V (Same as output voltage)	
	Voltage range		At load level < 70%: Within -40 to +20% of rated voltage (-40% becomes -20% when returning to grid operation)	
			At load level ≥ 70%: Within ±20% of rated voltage	
	Rated frequency		50/60 Hz (auto-sensing(2))	
	Frequency range		Within ±1/3/5/7% of rated frequency (same as output frequency regulation)	
	Required capacity(3)		1.1 kVA	1.5 kVA
	Input power factor		0.95 or greater	
AC output	No. of phases/wires		Single-phase 2-wire	
	Rated voltage		100/110/120 V (User-selectable. Factory setting: 100 V)	
	Rated current		10 A	12.5 A
	Voltage regulation		Within ±2% of rated voltage (at rated output)	
	Rated frequency		50/60 Hz (Same as the input rated frequency)	
	Frequency regulation	During grid operation	Within ±1/3/5/7% of the rated frequency (User-selectable. Factory setting: ±3%)	
		During battery operation	Within ±0.5% of rated frequency	
	Output waveform		Pure sine wave	
	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	0.8 lagging (Variation range: 0.7 lagging to 1.0)	
	Transient voltage fluctuation	For abrupt load change	Within ±5% of rated voltage (For 0⇔100% load step changes at rated input)	
		For loss or return of input power	Within ±5% of rated voltage (at rated output)	
		For abrupt input voltage change	Within ±5% of rated voltage (For ±10% abrupt change)	
	Overcurrent protection		Automatic transfer to bypass (With automatic retransfer function)	
	Overload capability	Inverter	105% (for 200 ms)	
		Bypass	200% (for 30 s), 800% (for 2 cycles)	
	Output Line Control		Yes	
Battery	Type		Lithium-ion battery	
	Battery backup time(4)	Initial value	13 min (15 min)	8 min (10 min)
		After 10 years(5)	11 min (12 min)	6 min (8 min)
	Battery self-test		Can be enabled (Factory setting: "disabled")	
Interface	PC port		RS-232C	
	Remote port		Remote ON/OFF switch (can control up to 5 UPS units in Linked Operation using a dedicated connection cable)	
	Dry contact		Optional dry contact interface card is required	
	Network support		Optional LAN interface card is required	
Acoustic noise	During normal operation		41 dB	45 dB
	During battery operation or at a temperature above 40˚C		51 dB	51 dB
Heat dissipation (At rated operation, after battery charging completed)			82 W	127 W
Input leakage current			3 mA	3 mA
Operating environment			Ambient temperature: -20 to +55˚C,(6) humidity: 10 to 90% RH (non-condensing)	
Storage environment(7)			Temperature: -20 to +55˚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.)	
Safety standard			UL 1778 5th edition (E226092), CSA C22.2 No. 107.3-14 (3rd edition)	
EMC standard			Compliant with VCCI 32-1 Class A Self-declared for FCC Part 15, Subpart B Class A	
Separate options				
Rack support rails(8)			RM030-US (2U)	
Floor mounting brackets(9)			FMA11KA00	
Caster base(10)			CBA11KA01	
Air filter kit(11)			FL008-3	

(1) If single-wire grounding the AC input and output, set the input/output ground phase according to the UPS specification. The W (N) terminal of AC input (S phase) and the W (N) terminal of AC output (V phase) are to be grounded.

(2) The inverter synchronizes operation with AC input and allows uninterrupted transfer through a bypass circuit provided that the AC input frequency is within a range of the rated frequency ±3% (1, 3, 5, or 7% selectable) and the AC input voltage is within the rated voltage ±20% (if the load level is less than 70%: between -40% and +20%).

(3) Max. capacity during battery recovery charging

(4) At 25°C ambient temperature and load power factor of 0.8, using new, fully charged batteries. In parentheses are values at 0.7 load power factor.

(5) Assuming 10 power outages per year

(6) When the battery temperature exceeds 55°C, battery charging will stop and a Device Error (minor malfunction) will be generated to warn the faulty battery temperature.

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

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

(9) Used to secure a free-standing type UPS to the floor.

(10) Used to carry a vertically-installed UPS.

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

Dimensions

UL certified models | Output capacity **1 kVA, 1.5 kVA**

Order no.(1)		S-A11KL102C0013UJ	S-A11KL152C0008UJ
Rated output capacity (apparent power / active power)		1 kVA / 0.8 kW	At 100 V setting: 1.25 kVA / 1.0 kW At 110 V setting: 1.375 kVA / 1.1 kW At 120 V setting: 1.5 kVA / 1.2 kW
Battery backup time(2)		13 min (15 min)	8 min (10 min)
Battery capacity [Ah·cell]		80	80
Battery power consumption [Wh]		264	264
Input plug		NEMA 5-15P	NEMA 5-15P
Output outlet		NEMA 5-15R × 6	NEMA 5-15R × 6
Acoustic noise	During normal operation	41 dB	45 dB
	During battery operation or at a temperature above 40°C	51 dB	51 dB
Heat dissipation (At rated operation, after battery charging completed)		82 W	127 W
Input leakage current		3 mA	3 mA
Operating environment		Ambient temperature: -20 to +55°C,(3) humidity: 10 to 90% RH (non-condensing)	
Dimensions(4) (Unit: mm)			
Drawing		Fig. 1	Fig. 1
W		435	435
H		86 (2U)	86 (2U)
D		440	488
Mass		16 kg	17 kg

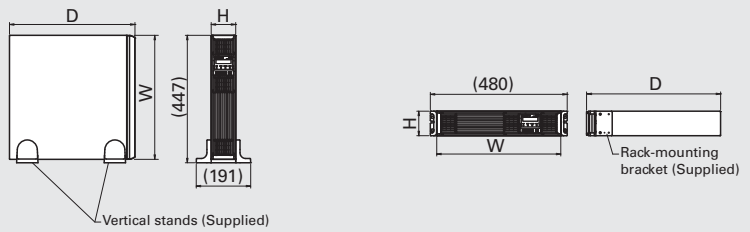
(1) Vertical/rack-mount convertible

(2) At 25°C ambient temperature and load power factor of 0.8, using new, fully charged batteries. In parentheses are values at 0.7 load power factor.

(3) When the battery temperature exceeds 55°C, battery charging will stop and a Device Error (minor malfunction) will be generated to warn the faulty battery temperature.

(4) Dimensions do not include protruding objects like screws.

Fig. 1



Paint color: Black (Munsell N1.5)

Input plug shape

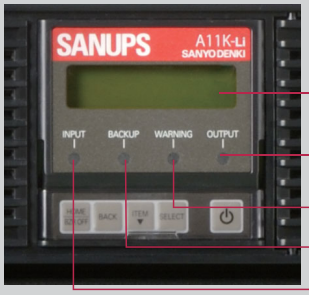
NEMA 5-15P

Output outlet shape

NEMA 5-15R

Views and Part Names

LCD Panel



Sliding button cover Opened (slides up/down)

1.5 kVA, Front View

100 to 600 min
Battery backup time

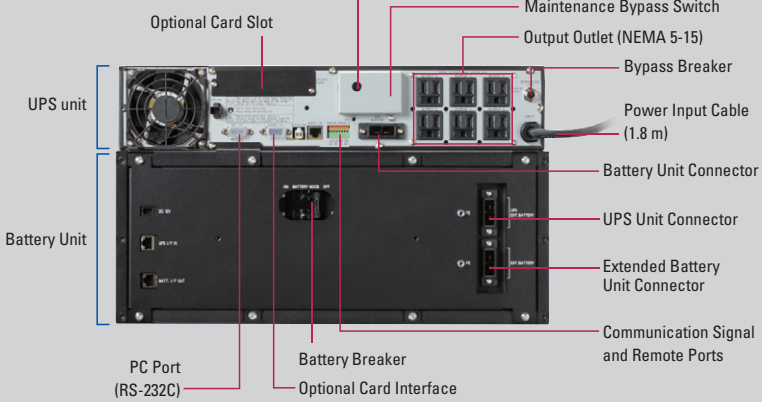
3 kVA, Front View

50 to 300 min
Battery backup time

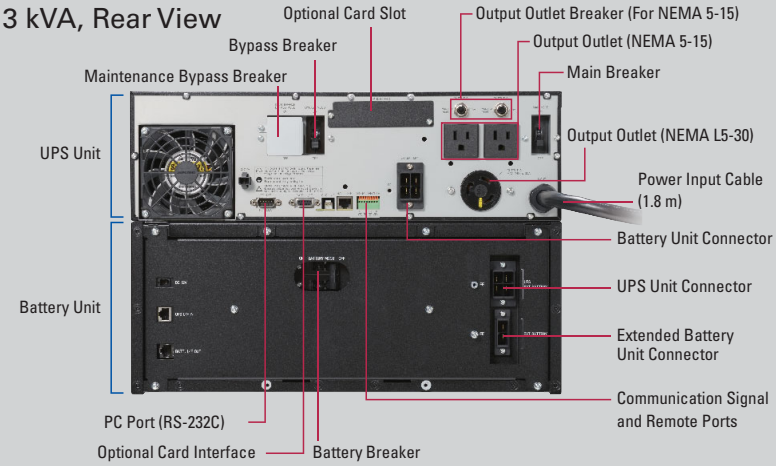
5 kVA, Front View

30 to 180 min
Battery backup time

1.5 kVA, Rear View

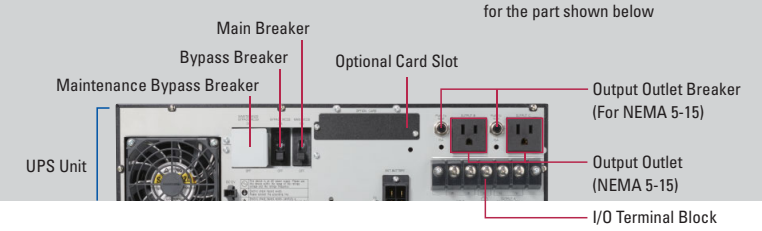


3 kVA, Rear View

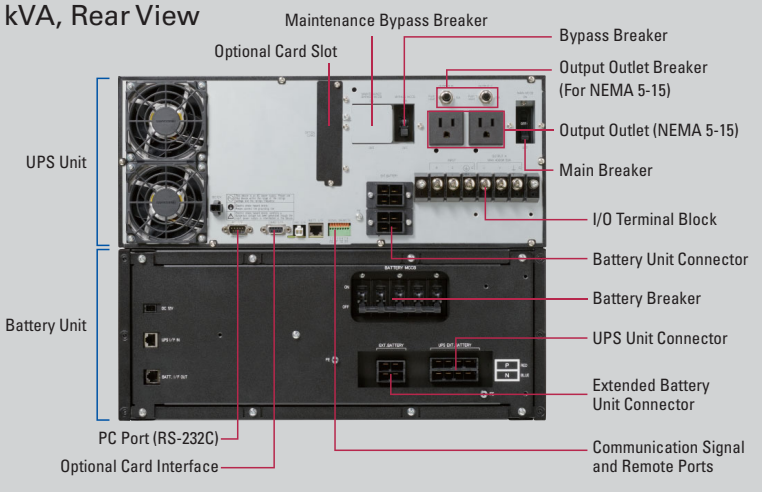


3 kVA Terminal Block Type, Rear View

Same as above model except for the part shown below



5 kVA, Rear View



Note: The photos above may look different from the actual products in the printed text, etc.

Specifications

Output capacity **1.5** to **5** kVA　Battery backup time **30** to **600** min

Order no. (A set of a UPS unit and battery units)			S-A11KL152B0□00TSN00□□	S-A11KL302B0□□0TS□00□□	S-A11KL502B0□□0TST00□□
UPS unit model no.			A11KL152	A11KL302	A11KL502
Rated output capacity (apparent power / active power)			1.5 kVA / 1.2 kW	3 kVA / 2.4 kW	5 kVA / 4 kW
Technology	Topology		Double conversion online		
	Rectifier		High power factor converter		
	Cooling method		Forced air cooling		
	Inverter		High-frequency PWM		
AC input	No. of phases/wires		Single-phase 2-wire(1)		
	Rated voltage		100/110/120 V (Same as output voltage)		
	Voltage range		At load level < 70%: Within -40 to +20% of rated voltage (-40% becomes -20% for recovery voltage)		
			At load level ≥ 70%: Within ±20% of rated voltage		
	Rated frequency		50/60 Hz (auto-sensing(2))		
	Frequency range		Within ±1, 3, 5, or 7% of rated frequency (same as output frequency regulation)		
	Required capacity(3)		1.5 kVA	3.0 kVA	5.3 kVA
	Input power factor		0.95 or greater	0.97 or greater	
AC output	No. of phases/wires		Single-phase 2-wire		
	Rated voltage		100/110/120 V (User-selectable. Factory setting: 100 V)		
	Rated current		15 A	30 A	50 A
	Voltage regulation		Within ±2% of rated voltage (at rated output)		
	Rated frequency		50/60 Hz (Same as the input rated frequency)		
	Frequency regulation	During grid operation	Within ±1, 3, 5, or 7% of the rated frequency (User-selectable. Factory setting: ±3%)		
		During battery operation	Within ±0.5% of rated frequency		
	Output waveform		Pure sine wave		
	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	0.8 lagging (Variation range: 0.7 lagging to 1.0)		
	Transient voltage fluctuation	For abrupt load change	Within ±5% of rated voltage (For 0⇔100% load step changes at rated input; output switching)		
		For loss or return of input power	Within ±5% of rated voltage (At rated output)		
		For abrupt input voltage change	Within ±5% of rated voltage (For ±10% abrupt change)		
	Overcurrent protection		Automatic transfer to bypass (With automatic retransfer function)		
	Overload capability	Inverter	105% (for 200 ms)		
		Bypass	200% (for 30 s), 800% (for 2 cycles)		
	Output Line Control		No		
Battery	Type		Lithium-ion battery		
	Battery backup time(4)	Initial value	100/200/300/400/500/600 min	50/100/150/200/250/300 min	30/60/90/120/150/180 min
		After 10 years(5)	95/190/285/380/475/570 min	47/95/142/190/237/285 min	28/57/85/114/142/171 min
	Battery self-test		Settings possible (Factory setting: "disabled")		
Interface	PC port		RS-232C		
	Remote port		Remote ON/OFF switch (can control up to 5 UPS units in Linked Operation using a dedicated connection cable)		
	Communication signal port		Failure/Outage		
	Dry contact		Optional dry contact interface card is required		
	Network support		Optional LAN interface card is required		
Acoustic noise	During normal operation		45 dB or less	46 dB or less	46 dB or less
	During battery operation or at a temperature above 40˚C		51 dB or less	55 dB or less	55 dB or less (60 dB or less when battery voltage is low)
Heat dissipation (At rated operation, after battery charging completed)			127 W	254 W	430 W
Input leakage current			3 mA or less	3.5 mA or less	3.5 mA or less
Operating environment			Ambient temperature: -20 to +55˚C,(6) humidity: 10 to 90% RH (non-condensing)		
Storage environment(7)			Ambient temperature: -20 to +55˚C, humidity: 10 to 90% RH (non-condensing)		
Expected service life (of the UPS unit excluding battery)			10 years (At a 30ºC average ambient temperature. For reference purposes only.)		
EMC standard			Compliant with VCCI 32-1 Class A		
Separate options					
UPS unit rack support rails(8)			RM030-US (2U)	RM027-US (3U)	RM028-US (4U)
Battery unit rack support rails(8)			RM028-US (4U)	RM028-US (4U)	RM028-US (4U)
Floor mounting brackets (for free-standing type)(9)			FMBCA01	FMBCA01	FMBCA01
Air filter kit(10)			FL008-3	FL009-3	FL010-3

(1) If single-wire grounding the AC input and output, set the input/output ground phase according to the UPS specification. The W (N) terminal of AC input (S phase) and the W (N) terminal of AC output (V phase) are to be grounded.
(2) The inverter synchronizes operation with AC input and allows uninterrupted transfer through a by-pass circuit provided that the AC input frequency is within a range of the rated frequency ±3% (1, 3, 5, or 7% selectable) and the AC input voltage is within the rated voltage ±20% (if the load level is less than 70%: between -40% and +20%).
(3) Max. capacity during battery recovery charging
(4) At 25˚C ambient temperature and load power factor of 0.8, using new, fully charged batteries.
(5) Assuming 10 power outages per year
(6) When the battery temperature exceeds 55˚C, battery charging will stop and a Device Error (minor malfunction) will be generated to warn the faulty battery temperature.
(7) Avoid use or storage in 30˚C or higher temperatures for extended periods of time, or the battery's life will be shortened. If a UPS is to be stored for a long period, it will be necessary to recharge batteries once a year.
(8) 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.
(9) Used to secure a free-standing type to the floor.
(10) A front side air intake filter for preventing dust ingress.

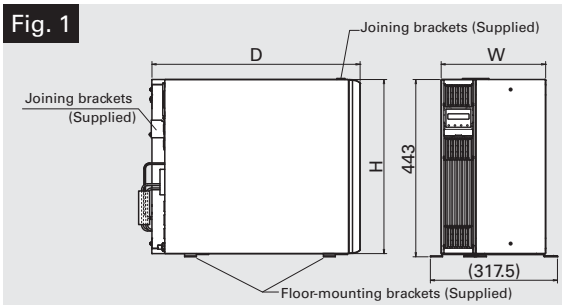
Dimensions

Output capacity **1.5 kVA**

Free-standing type Order no. (A set of a UPS unit and battery units)	S-A11KL152B0100TSN00[1]	S-A11KL152B0200TSN00	S-A11KL152B0300TSN00	S-A11KL152B0400TSN00
Rack mount type Order no. (A set of a UPS unit and battery units)		S-A11KL152B0200TSN00RM	S-A11KL152B0300TSN00RM	S-A11KL152B0400TSN00RM
Rated output capacity (apparent power / active power)	1.5 kVA / 1.2 kW			
Battery backup time[2]	100 min	200 min	300 min	400 min
Battery capacity [Ah·cell]	1104	2208	3312	4416
Battery power consumption [Wh]	2484	4968	7452	9936
Input plug	NEMA 5-15P			
Output outlet	NEMA 5-15R × 6			
Acoustic noise During normal operation	45 dB or less			
Acoustic noise During battery operation or at a temperature above 40°C	51 dB or less			
Heat dissipation (At rated operation, after battery charging completed)	127 W			
Input leakage current	3 mA or less			
Operating environment	Ambient temperature: -20 to +55°C,[3] humidity: 10 to 90% RH (non-condensing)			
Free-standing type - Dimensions[4] (Unit: mm)				
Drawing	Fig. 1	Fig. 4	Fig. 5	Fig. 6
W	86+175	435	435	435
H	435	541	716	891
D	520	520	520	520
Mass	66 kg	124 kg	176 kg	228 kg
Rack mount type - UPS unit dimensions[4] (Unit: mm)				
Drawing	Fig. 2			
W	435			
H1	86 (2U)			
D	488			
Mass	14 kg			
Rack mount type - Battery unit dimensions[4] (Unit: mm)				
Drawing	Fig. 3 × 1	Fig. 3 × 2	Fig. 3 × 3	Fig. 3 × 4
W	435	435	435	435
H2	175 (4U)	175 × 2 (8U)	175 × 3 (12U)	175 × 4 (16U)
D	520	520	520	520
Mass	52 kg	52 kg × 2	52 kg × 3	52 kg × 4

(1) Vertical/rack-mount convertible
(2) At 25°C ambient temperature and load power factor of 0.8, using new, fully charged batteries.
(3) When the battery temperature exceeds 55°C, battery charging will stop and a Device Error (minor malfunction) will be generated to warn the faulty battery temperature.
(4) Dimensions do not include protruding objects like screws.

Fig. 1



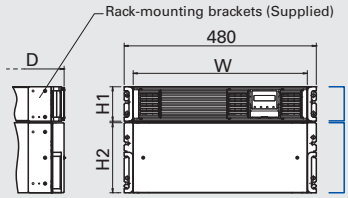


Fig. 2

Fig. 3

Rack mount type - Rack mounting brackets:
Included but not installed with a 100-minute set.
The 200, 300, and 400-minute sets will be shipped with brackets installed.

Fig. 4

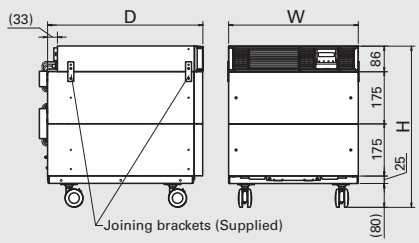


Fig. 5

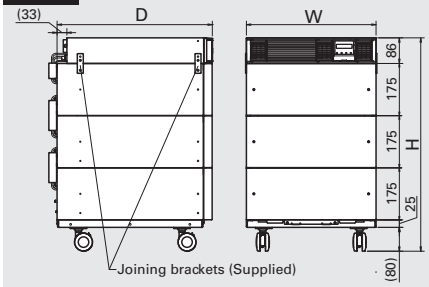
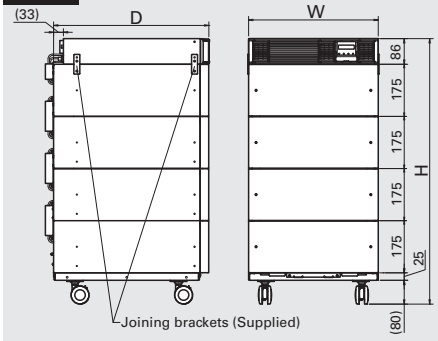
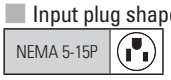


Fig. 6

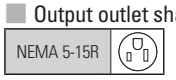


Paint color: Black (Munsell N1.5)

Input plug shape



Output outlet shape



Output capacity 1.5 kVA

Free-standing type Order no. (A set of a UPS unit and battery units)		S-A11KL152B0500TSN00	S-A11KL152B0600TSN00
Rack mount type Order no. (A set of a UPS unit and battery units)		—	—
Rated output capacity (apparent power / active power)		1.5 kVA / 1.2 kW	
Battery backup time(1)		500 min	600 min
Battery capacity [Ah·cell]		5520	6624
Battery power consumption [Wh]		12420	14904
Input plug		NEMA 5-15P	
Output outlet		NEMA 5-15R × 6	
Acoustic noise	During normal operation	45 dB	
	During battery operation or at a temperature above 40˚C	51 dB	
Heat dissipation (At rated operation, after battery charging completed)		127 W	
Input leakage current		3 mA or less	
Operating environment		Ambient temperature: -20 to +55˚C,(2) humidity: 10 to 90% RH (non-condensing)	
Free-standing type - Dimensions(3) (Unit: mm)			
Drawing		Fig. 7	Fig. 8
W		435	435 + 435 (+ 65)
H		1066	716
D		520	520
Mass		286 kg	184 + 170 kg
Rack mount type - UPS unit dimensions(3) (Unit: mm)			
Drawing		—	
W		—	
H1		—	
D		—	
Mass		—	
Rack mount type - Battery unit dimensions(3) (Unit: mm)			
Drawing		—	
W		—	
H2		—	
D		—	
Mass		—	

(1) At 25˚C ambient temperature and load power factor of 0.8, using new, fully charged batteries.
(2) When the battery temperature exceeds 55˚C, battery charging will stop and a Device Error (minor malfunction) will be generated to warn the faulty battery temperature.
(3) Dimensions do not include protruding objects like screws.

Fig. 7

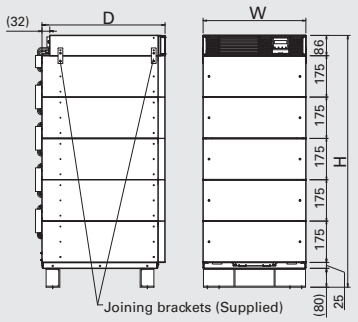
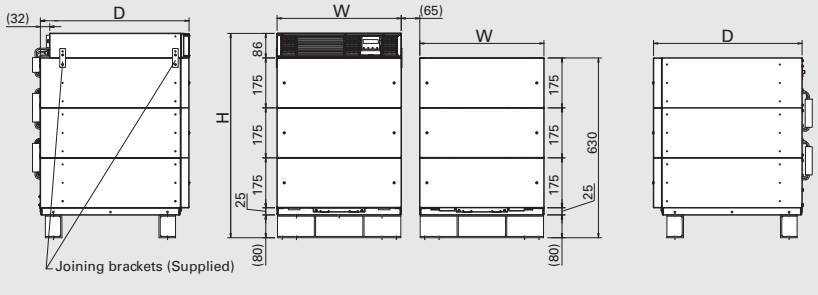


Fig. 8



Paint color: Black (Munsell N1.5)

■ Input plug shape

NEMA 5-15P

■ Output outlet shape

NEMA 5-15R

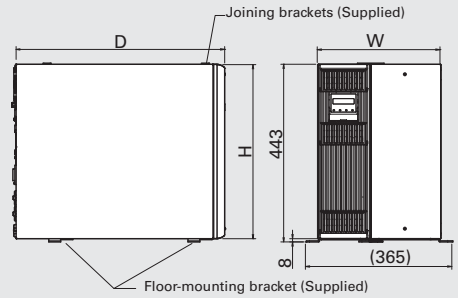
Dimensions

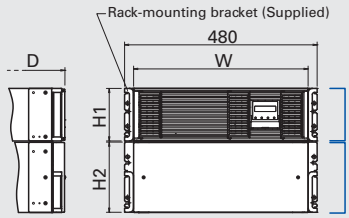
Output capacity 3 kVA — Terminal block type in the next spread

Free-standing type Order no. (A set of a UPS unit and battery units)		S-A11KL302B0050TSN00(1)	S-A11KL302B0100TSN00	S-A11KL302B0150TSN00	S-A11KL302B0200TSN00
Rack mount type Order no. (A set of a UPS unit and battery units)			S-A11KL302B0100TSN00RM	S-A11KL302B0150TSN00RM	S-A11KL302B0200TSN00RM
Rated output capacity (apparent power / active power)		3 kVA / 2.4 kW			
Battery backup time(2)		50 min	100 min	150 min	200 min
Battery capacity [Ah·cell]		1104	2208	3312	4416
Battery power consumption [Wh]		2484	4968	7452	9936
Input plug		NEMA L5-30P			
Output outlet		NEMA L5-30R × 1, NEMA 5-15R × 2 (15 A each)			
Acoustic noise	During normal operation	46 dB or less			
	During battery operation or at a temperature above 40°C	55 dB or less			
Heat dissipation (At rated operation, after battery charging completed)		254 W			
Input leakage current		3.5 mA or less			
Operating environment		Ambient temperature: -20 to +55°C,(3) humidity: 10 to 90% RH (non-condensing)			
Free-standing type - Dimensions(4) (Unit: mm)					
Drawing		Fig. 1	Fig. 4	Fig. 5	Fig. 6
W		131+175	435	435	435
H		435	586	761	936
D		520	520	520	520
Mass		74 kg	132 kg	184 kg	236 kg
Rack mount type - UPS unit dimensions(4) (Unit: mm)					
Drawing		Fig. 2			
W		435			
H1		131 (3U)			
D		520			
Mass		22 kg			
Rack mount type - Battery unit dimensions(4) (Unit: mm)					
Drawing		Fig. 3 × 1	Fig. 3 × 2	Fig. 3 × 3	Fig. 3 × 4
W		435	435	435	435
H2		175 (4U)	175 × 2 (8U)	175 × 3 (12U)	175 × 4 (16U)
D		520	520	520	520
Mass		52 kg	52 kg × 2	52 kg × 3	52 kg × 4

(1) Vertical/rack-mount convertible
(2) At 25°C ambient temperature and load power factor of 0.8, using new, fully charged batteries.
(3) When the battery temperature exceeds 55°C, battery charging will stop and a Device Error (minor malfunction) will be generated to warn the faulty battery temperature.
(4) Dimensions do not include protruding objects like screws.

Fig. 1





UPS unit — Fig. 2
Battery unit — Fig. 3

Rack mount type - Rack mounting brackets:
Included but not installed with a 50-minute set.
The 100, 150, and 200-minute sets will be shipped with brackets installed.

Fig. 4

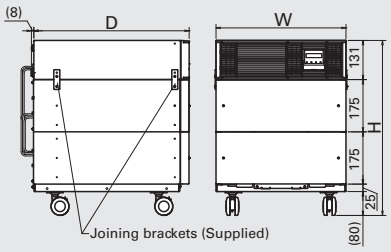


Fig. 5

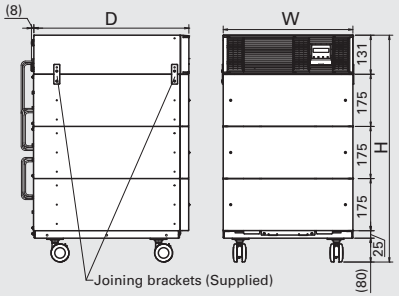
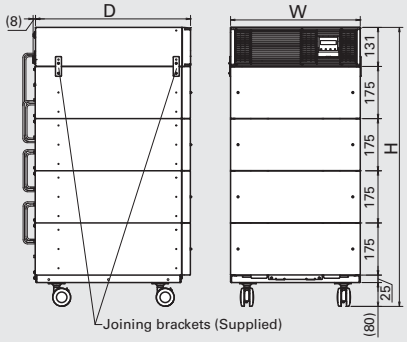
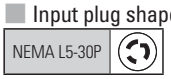


Fig. 6

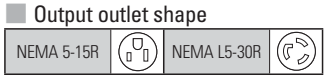


Paint color: Black (Munsell N1.5)

Input plug shape



Output outlet shape



Output capacity **3 kVA** Terminal block type in the next page

Free-standing type Order no. (A set of a UPS unit and battery units)		**S-A11KL302B0250TSN00**	**S-A11KL302B0300TSN00**
Rack mount type Order no. (A set of a UPS unit and battery units)		—	—
Rated output capacity (apparent power / active power)		3 kVA / 2.4 kW	
Battery backup time(1)		250 min	300 min
Battery capacity [Ah·cell]		5520	6624
Battery power consumption [Wh]		12420	14904
Input plug		NEMA L5-30P	
Output outlet		NEMA L5-30R × 1, NEMA 5-15R × 2 (15 A each)	
Acoustic noise	During normal operation	46 dB or less	
	During battery operation or at a temperature above 40°C	55 dB or less	
Heat dissipation (At rated operation, after battery charging completed)		254 W	
Input leakage current		3.5 mA or less	
Operating environment		Ambient temperature: -20 to +55°C,(2) humidity: 10 to 90% RH (non-condensing)	
Free-standing type - Dimensions(3) (Unit: mm)			
Drawing		Fig. 7	Fig. 8
W		435	435 + 435 (+ 65)
H		1111	761
D		520	520
Mass		294 kg	192 + 170 kg
Rack mount type - UPS unit dimensions(3) (Unit: mm)			
Drawing		—	
W		—	
H1		—	
D		—	
Mass		—	
Rack mount type - Battery unit dimensions(3) (Unit: mm)			
Drawing		—	
W		—	
H2		—	
D		—	
Mass		—	

(1) At 25°C ambient temperature and load power factor of 0.8, using new, fully charged batteries.
(2) When the battery temperature exceeds 55°C, battery charging will stop and a Device Error (minor malfunction) will be generated to warn the faulty battery temperature.
(3) Dimensions do not include protruding objects like screws.

Fig. 7

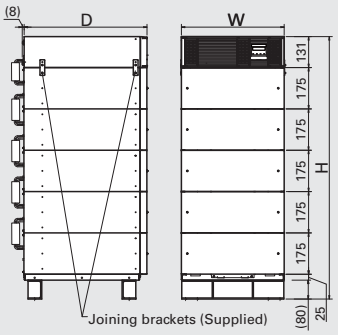
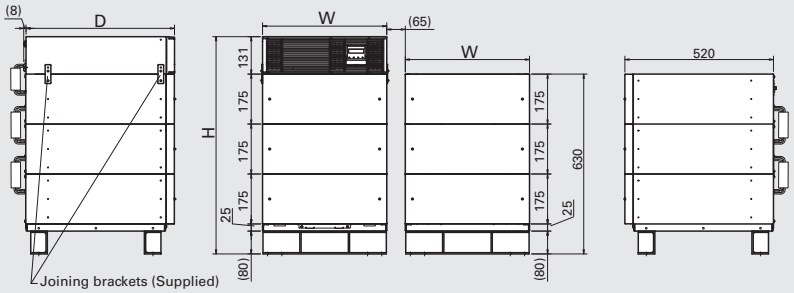


Fig. 8



Input plug shape

NEMA L5-30P

Output outlet shape

NEMA 5-15R		NEMA L5-30R

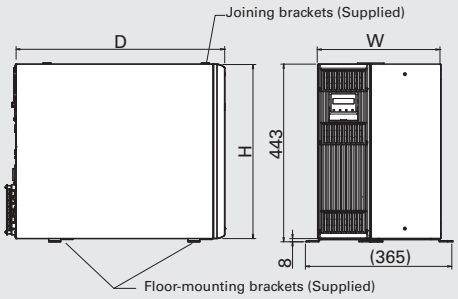
Dimensions

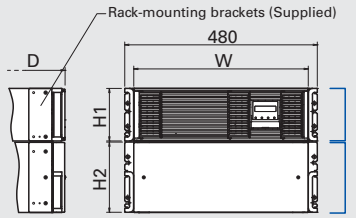
Output capacity **3 kVA** Terminal block type

Free-standing type Order no. (A set of a UPS unit and battery units)		S-A11KL302B0050TST00(1)	S-A11KL302B0100TST00	S-A11KL302B0150TST00	S-A11KL302B0200TST00
Rack mount type Order no. (A set of a UPS unit and battery units)			S-A11KL302B0100TST00RM	S-A11KL302B0150TST00RM	S-A11KL302B0200TST00RM
Rated output capacity (apparent power / active power)		3 kVA / 2.4 kW			
Battery backup time(2)		50 min	100 min	150 min	200 min
Battery capacity [Ah·cell]		1104	2208	3312	4416
Battery power consumption [Wh]		2484	4968	7452	9936
Input terminal		M5 terminal			
Output terminal and receptacle		M5 terminal and NEMA 5-15R × 2 (15 A each)			
Acoustic noise	During normal operation	46 dB or less			
	During battery operation or at a temperature above 40°C	55 dB or less			
Heat dissipation (At rated operation, after battery charging completed)		254 W			
Input leakage current		3.5 mA or less			
Operating environment		Ambient temperature: -20 to +55°C,(3) humidity: 10 to 90% RH (non-condensing)			
Free-standing type - Dimensions(4) (Unit: mm)					
Drawing		Fig. 1	Fig. 4	Fig. 5	Fig. 6
W		131+175	435	435	435
H		435	586	761	936
D		520	520	520	520
Mass		74 kg	132 kg	184 kg	236 kg
Rack mount type - UPS unit dimensions(4) (Unit: mm)					
Drawing		Fig. 2			
W		435			
H1		131 (3U)			
D		520			
Mass		22 kg			
Rack mount type - Battery unit dimensions(4) (Unit: mm)					
Drawing		Fig. 3 × 1	Fig. 3 × 2	Fig. 3 × 3	Fig. 3 × 4
W		435	435	435	435
H2		175 (4U)	175 × 2 (8U)	175 × 3 (12U)	175 × 4 (16U)
D		520	520	520	520
Mass		52 kg	52 kg × 2	52 kg × 3	52 kg × 4

(1) Vertical/rack-mount convertible
(2) At 25°C ambient temperature and load power factor of 0.8, using new, fully charged batteries.
(3) When the battery temperature exceeds 55°C, battery charging will stop and a Device Error (minor malfunction) will be generated to warn the faulty battery temperature.
(4) Ignoring screw lengths and the like

Fig. 1





UPS unit **Fig. 2**

Battery unit **Fig. 3**

Rack mount type - Rack mounting brackets:
Included but not installed with a 50-minute set.
The 100, 150, and 200-minute sets will be shipped with brackets installed.

Fig. 4

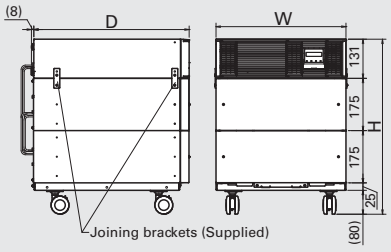


Fig. 5

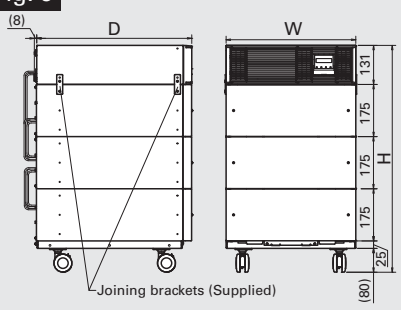
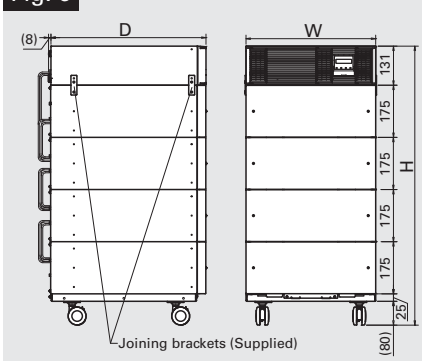


Fig. 6



Paint color: Black (Munsell N1.5)

Output outlet shape

NEMA 5-15R

Output capacity 3 kVA — Terminal block type

Free-standing type Order no. (A set of a UPS unit and battery units)		**S-A11KL302B0250TST00**	**S-A11KL302B0300TST00**
Rack mount type Order no. (A set of a UPS unit and battery units)		—	—
Rated output capacity (apparent power / active power)		3 kVA / 2.4 kW	
Battery backup time(1)		250 min	300 min
Battery capacity [Ah·cell]		5520	6624
Battery power consumption [Wh]		12420	14904
Input plug		M5 terminal	
Output outlet		M5 terminal and NEMA 5-15R × 2 (15 A each)	
Acoustic noise	During normal operation	46 dB or less	
	During battery operation or at a temperature above 40˚C	55 dB or less	
Heat dissipation (At rated operation, after battery charging completed)		254 W	
Input leakage current		3.5 mA or less	
Operating environment		Ambient temperature: -20 to +55˚C,(2) humidity: 10 to 90% RH (non-condensing)	
Free-standing type - Dimensions(3) (Unit: mm)			
Drawing		Fig. 7	Fig. 8
W		435	435 + 435 (+ 65)
H		1111	761
D		520	520
Mass		294 kg	192 + 170 kg
Rack mount type - UPS unit dimensions(3) (Unit: mm)			
Drawing		—	
W		—	
H1		—	
D		—	
Mass		—	
Rack mount type - Battery unit dimensions(3) (Unit: mm)			
Drawing		—	
W		—	
H2		—	
D		—	
Mass		—	

(1) At 25°C ambient temperature and load power factor of 0.8, using new, fully charged batteries.
(2) When the battery temperature exceeds 55°C, battery charging will stop and a Device Error (minor malfunction) will be generated to warn the faulty battery temperature.
(3) Dimensions do not include protruding objects like screws.

Fig. 7

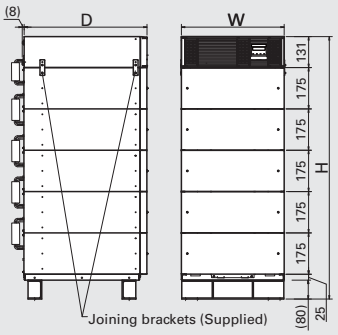
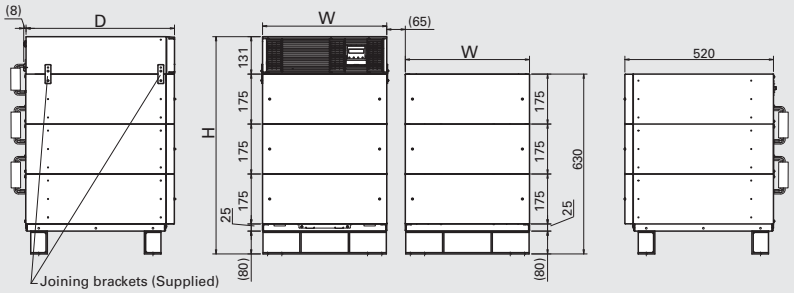


Fig. 8



Paint color: Black (Munsell N1.5)

Output outlet shape

NEMA 5-15R	

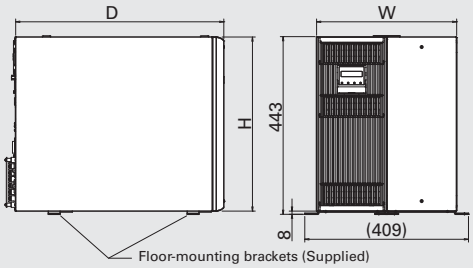
Dimensions

Output capacity **5 kVA**

Free-standing type Order no. (A set of a UPS unit and battery units)		S-A11KL502B0030TST00[1]	S-A11KL502B0060TST00	S-A11KL502B0090TST00
Rack mount type Order no. (A set of a UPS unit and battery units)			S-A11KL502B0060TST00RM	S-A11KL502B0090TST00RM
Rated output capacity (apparent power / active power)		5 kVA / 4 kW		
Battery backup time[2]		30 min	60 min	90 min
Battery capacity [Ah·cell]		1104	2208	3312
Battery power consumption [Wh]		2484	4968	7452
Input terminal		M5 terminal		
Output terminal and receptacle		M5 terminal and NEMA 5-15R × 2 (15 A each)		
Acoustic noise	During normal operation	45 dB or less		
	During battery operation or at a temperature above 40°C	56 dB or less		
	When battery voltage is low	60 dB or less		
Heat dissipation (At rated operation, after battery charging completed)		430 W		
Input leakage current		3.5 mA or less		
Operating environment		Ambient temperature: -20 to +55°C,[3] humidity: 10 to 90% RH (non-condensing)		
Free-standing type - Dimensions[4] (Unit: mm)				
Drawing		Fig. 1	Fig. 4	Fig. 5
W		175+175	435	435
H		435	630	805
D		520	520	520
Mass		82 kg	140 kg	192 kg
Rack mount type - UPS unit dimensions[4] (Unit: mm)				
Drawing		Fig. 2		
W		435		
H1		175 (4U)		
D		520		
Mass		30 kg		
Rack mount type - Battery unit dimensions[4] (Unit: mm)				
Drawing		Fig. 3 × 1	Fig. 3 × 2	Fig. 3 × 3
W		435	435	435
H2		175 (4U)	175 × 2 (8U)	175 × 3 (12U)
D		520	520	520
Mass		52 kg	52 kg × 2	52 kg × 3

(1) Vertical/rack-mount convertible
(2) At 25°C ambient temperature and load power factor of 0.8, using new, fully charged batteries.
(3) When the battery temperature exceeds 55°C, battery charging will stop and a Device Error (minor malfunction) will be generated to warn the faulty battery temperature.
(4) Dimensions do not include protruding objects like screws.

Fig. 1



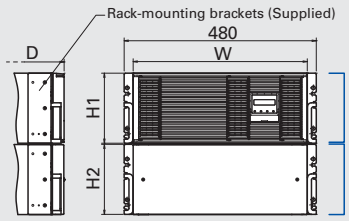


Fig. 2

Fig. 3

Rack mount type - Rack mounting brackets:
Included but not installed with a 30-minute set.
The 60, 90, and 120-minute sets will be shipped with brackets installed.

Fig. 4

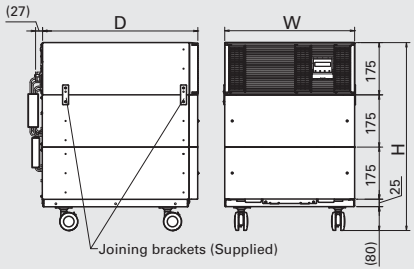
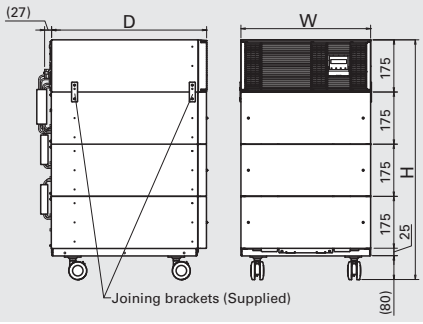


Fig. 5



Paint color: Black (Munsell N1.5)

Output outlet shape

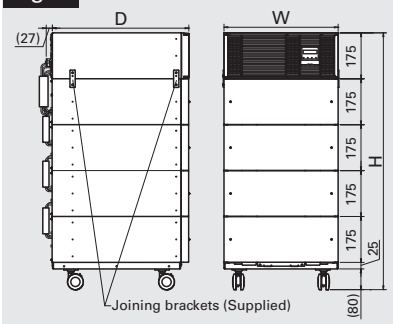
NEMA 5-15R

Output capacity 5 kVA

Free-standing type Order no. (A set of a UPS unit and battery units)		**S-A11KL502B0120TST00**	**S-A11KL502B0150TST00**	**S-A11KL502B0180TST00**
Rack mount type Order no. (A set of a UPS unit and battery units)		**S-A11KL502B0120TST00RM**	—	—
Rated output capacity (apparent power / active power)		5 kVA / 4 kW		
Battery backup time(1)		120 min	150 min	180 min
Battery capacity [Ah-cell]		4416	5520	6624
Battery power consumption [Wh]		9936	12420	14904
Input terminal		M5 terminal		
Output terminal and receptacle		M5 terminal and NEMA 5-15R × 2 (15 A each)		
Acoustic noise	During normal operation	45 dB or less	45 dB or less	
	During battery operation or at a temperature above 40°C	56 dB or less	56 dB or less	
	When battery voltage is low	60 dB or less	60 dB or less	
Heat dissipation (At rated operation, after battery charging completed)		430 W		
Input leakage current		3.5 mA or less		
Operating environment		Ambient temperature: -20 to +55°C,(2) humidity: 10 to 90% RH (non-condensing)		
Free-standing type - Dimensions(3) (Unit: mm)				
Drawing		Fig. 1	Fig. 4	Fig. 5
W		435	435	435 + 435 (+ 65)
H		980	1155	805
D		520	520	520
Mass		244 kg	302 kg	200 + 170 kg
Rack mount type - UPS unit dimensions(3) (Unit: mm)				
Drawing		Fig. 2	—	—
W		435	—	—
H1		175 (4U)	—	—
D		520	—	—
Mass		30 kg	—	—
Rack mount type - Battery unit dimensions(3) (Unit: mm)				
Drawing		Fig. 3 × 4	—	—
W		435	—	—
H2		175 × 4 (16U)	—	—
D		520	—	—
Mass		52 kg × 4	—	—

(1) At 25°C ambient temperature and load power factor of 0.8, using new, fully charged batteries.
(2) When the battery temperature exceeds 55°C, battery charging will stop and a Device Error (minor malfunction) will be generated to warn the faulty battery temperature.
(3) Dimensions do not include protruding objects like screws.

Fig. 1



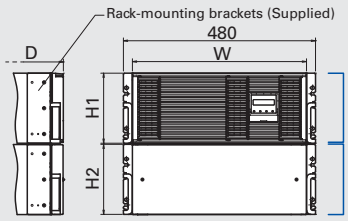


Fig. 2

Fig. 3

Rack mount type - Rack mounting brackets:
Included but not installed with a 30-minute set.
The 60, 90, and 120-minute sets will be shipped with brackets installed.

Fig. 4

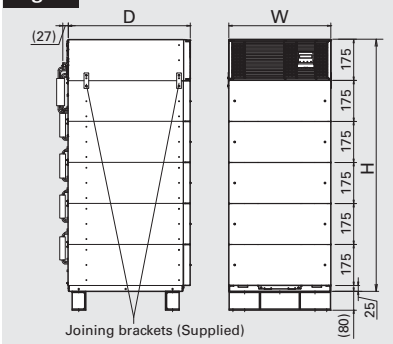
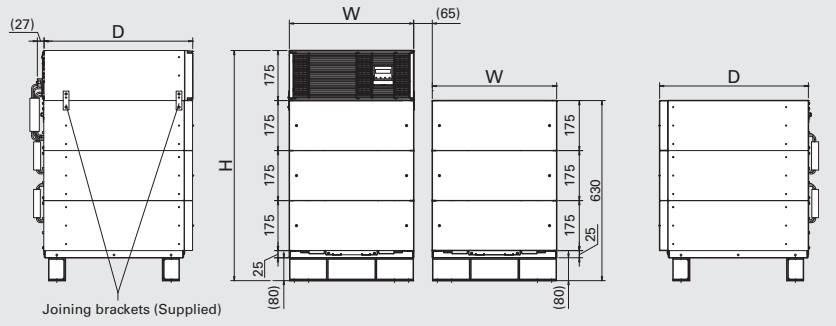


Fig. 5

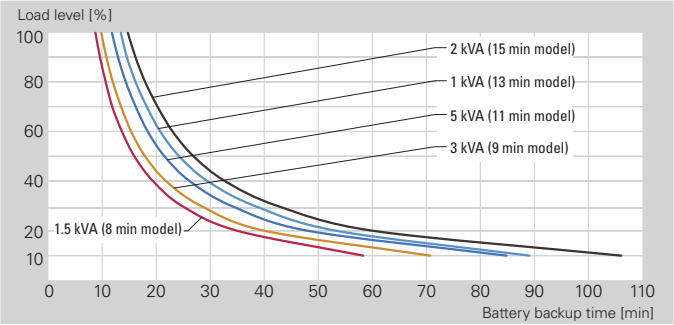


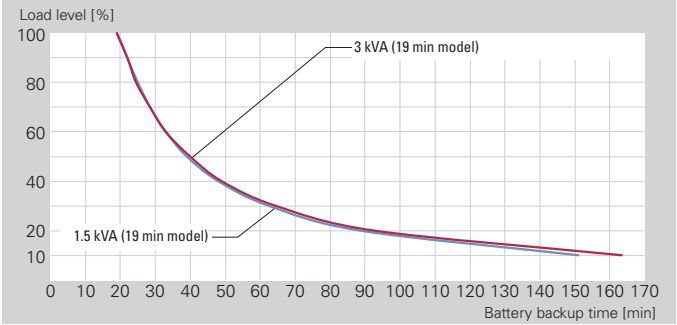
Paint color: Black (Munsell N1.5)

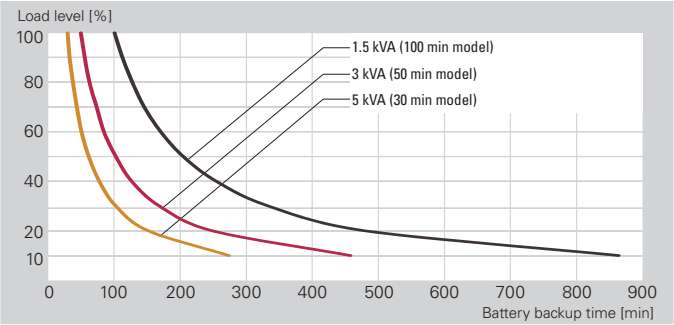
Output outlet shape

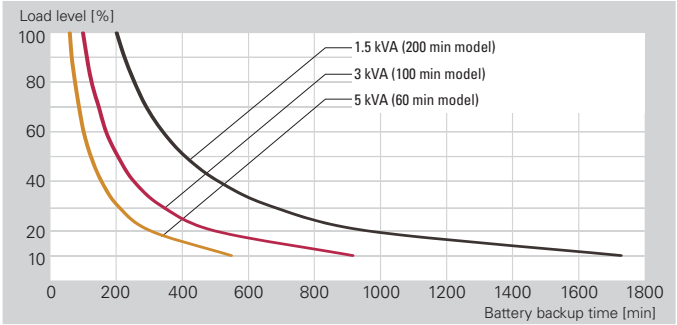
NEMA 5-15R	

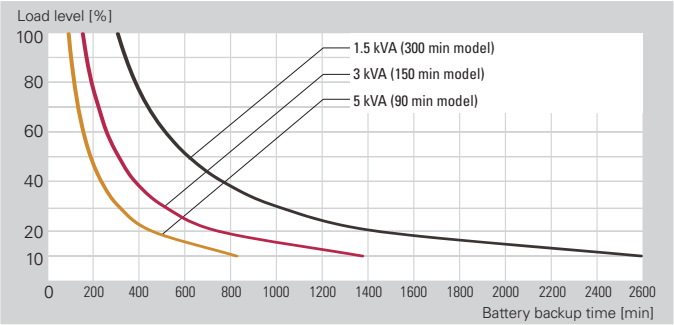
Load Level vs Backup Time

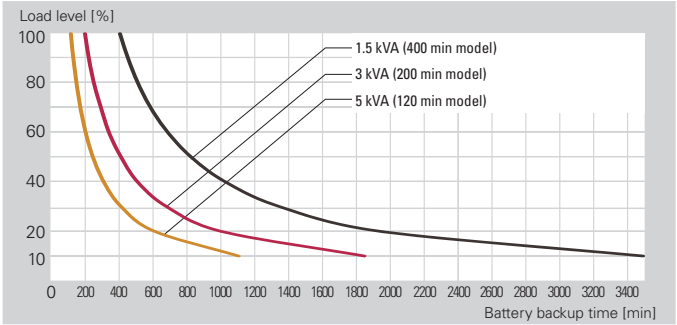


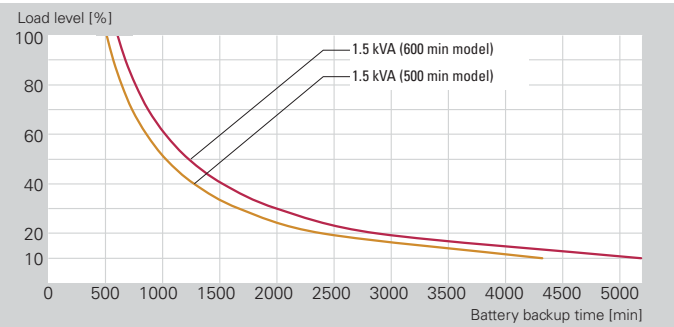


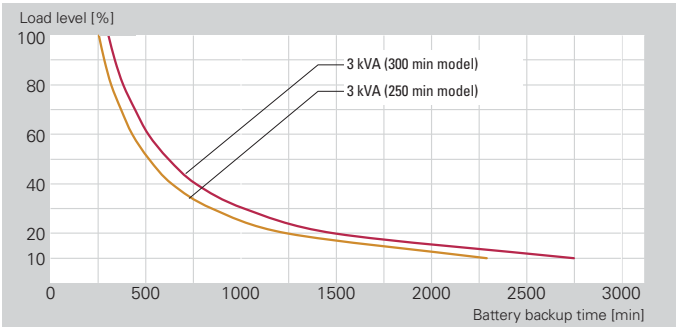


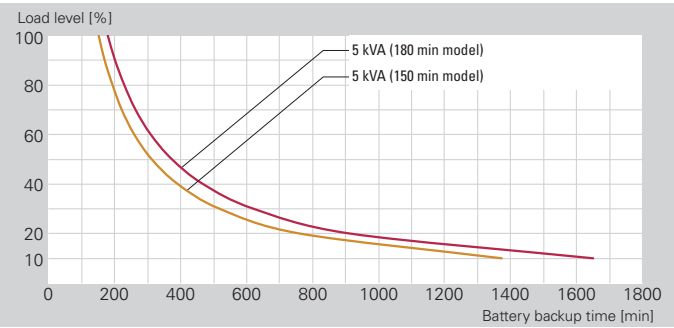












Note: Reference value at 25˚C ambient temperature and load power factor of 0.8, using new, fully charged batteries.

Network Options

Item		Model no.	Remarks
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.
Dry Contact Interface Card	Terminal block output	**PRCONIF005-US**	This card outputs no-voltage contact signals to notify UPS status. A and B contacts can be selected for each signal.
	D-sub output connector	**PRCONIF006-US**	
SANUPS SOFTWARE Download version	for Windows	**PMS52□00DL**(2)	SANUPS SOFTWARE is used to shut down multiple servers (up to 50 servers including USB-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 appropriate -suffix to the model number as on the right. **-10** (10 licenses) **-50** (50 licenses) **-100** (100 licenses)
	for Multi-OS(1)	**PMS53□00DL**(2)	
Remote switch	Cable length: 10 m	**RSW015**	This switch remotely turns on/off the UPS outlets via wired connection. It can control up to 5 UPS units in Linked Operation. (requires optional Linked Operation cable)
	Cable length: 2 m	**RSW016**	
Linked Operation cable	For branching, terminal connection; between relay connector and lead wire	**P10911**	A unit-to-unit cable for performing on/off switching of multiple UPS units.
	Cable length 1 m, between relay connector and lead wire	**P10912**	
	Cable length 3 m, between relay connector and lead wire	**P10913**	

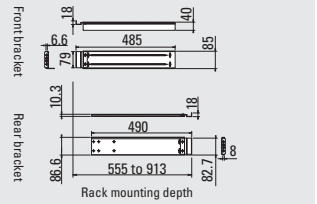
(1) Supports Windows, Unix, and Linux.
(2) The □'s denote revision characters.
Note: Optional products have different operating temperature ranges from the UPS.

Dimensions of Options (Unit: mm)

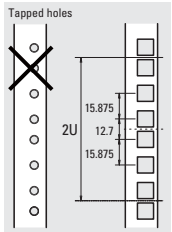
Rack support rails

Used for mounting the UPS on a standard 19-inch rack. A pair of left and right rails. Shown is the left rail.
They are not compatible with racks with tapped holes.

RM030-US (2U)

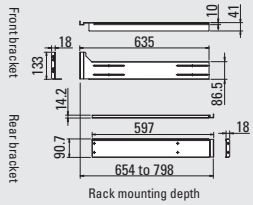


Mass: Approx. 1.4 kg (Paired: 2.8 kg)



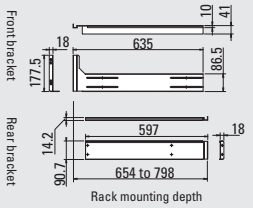
Mounting part

RM027-US (3U)



Mass: Approx. 2.6 kg (Paired: 5.2 kg)

RM028-US (4U)



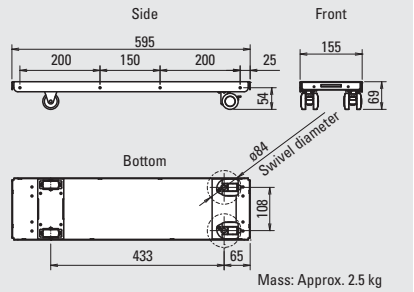
Mass: Approx. 2.7 kg (Paired: 5.4 kg)

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

Caster base

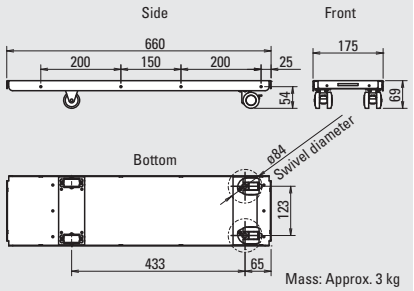
Used to move a vertically installed UPS.

CBA11KA01 (2U, 3U)



Mass: Approx. 2.5 kg

CBA11KA02 (4U)

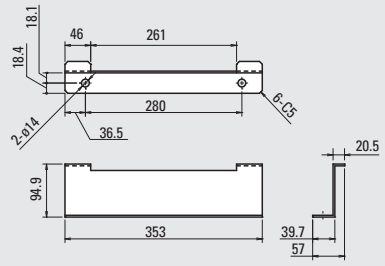


Mass: Approx. 3 kg

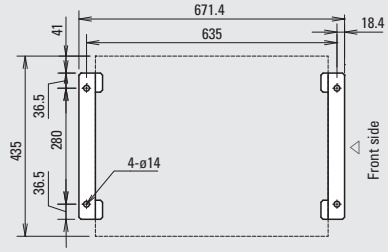
Floor mounting brackets

Used to secure a free-standing type to the floor.

FMBCA01



Installation example - Bottom view

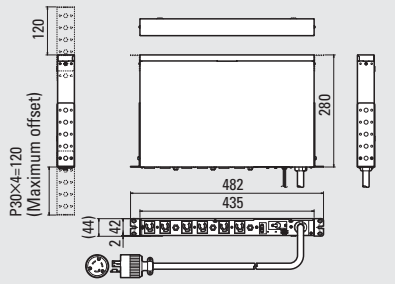


Mass: Approx. 1.2 kg each

Outlet box

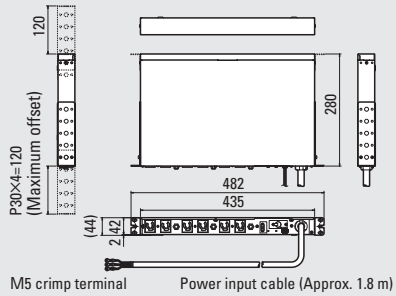
Enables Output Line Control, the coordinated on/off management of UPS outlets when needed.
Rated output: 2 to 3 kVA

P10030B (Outlet type)



NEMA L5-30P — Power input cable (Approx. 1.8 m)

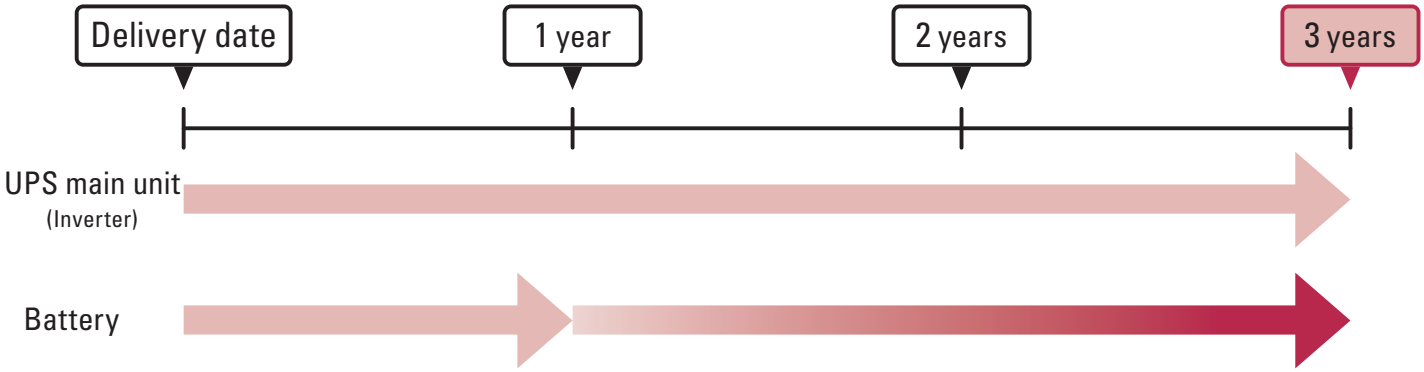
P10035B (Terminal block type)



M5 crimp terminal — Power input cable (Approx. 1.8 m)

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: This benefit is limited to users in Japan.

Complete registration on our website:

https://www.sanyodenki.com/

ECO PRODUCTS

■ ECO PRODUCTS

SANYO DENKI's ECO PRODUCTS are designed with the concept of lessening impact on the environment in the process from product development to waste. The product units and packaging materials are designed for reduced environmental impact. We have established our own assessment criteria on the environmental impacts applicable to all processes, ranging from design to manufacture. Those products that satisfy the criteria are accredited as ECO PRODUCTS.

- Fire Service Law and Fire Prevention Ordinance in Japan
  The Fire Prevention Ordinance regulates the total battery capacity of storage batteries, including lithium-ion batteries, that can be installed indoors. When installing UPSs indoors, confirm that the total battery capacity in one location does not exceed 20 kWh (4,800 Ah·cell). In other cases, consult with your local fire department for approval.
  Note that the UPSs cannot be used as an emergency power supply for firefighting equipment.

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

Notes before Purchase

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

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

SANYO DENKI CO., LTD. 3-33-1 Minami-Otsuka, Toshima-ku, Tokyo 170-8451, Japan TEL: +81 3 5927 1020 https://www.sanyodenki.com/

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