

SANUPS A13A-Li

Online UPS

Ver. 1
English

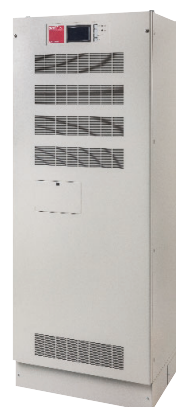


SANUPS A13A-Li

Lineup

[No. of phases/wires] Input/Output voltage	Output capacity		Battery backup time*	Model
	[kVA]	[kW]		
[3-phase 3-wire] 200 V _{model} 200/210/220 V	6.25	5	10 min	A13AL622
	12.5	10		A13AL123
	18.75	15		A13AL183
	25	20		A13AL253

* At a 25°C ambient temperature and a load power factor of 0.8, using new, fully charged batteries.



Compact and Lightweight

- The product weighs more than 15% less than the conventional lead-acid battery UPS.⁽¹⁾ The installation footprint is reduced to one-third and weight to one-quarter compared with our UPS equipped with long-life lead-acid batteries,⁽²⁾ helping maximize space utilization.

Long Service Life

- The lithium-ion battery delivers approximately three times the service life of lead-acid batteries. It can operate for 15 years without battery replacement,⁽³⁾ reducing maintenance costs.

High Efficiency

- By reducing losses in key components, the product improves conversion efficiency by 8% compared with the conventional product,⁽⁴⁾ achieving a maximum conversion efficiency of 92%. This reduces power consumption and CO₂ emissions.

(1) Conventional product: SANUPS A13A double conversion online UPS (valve-regulated lead-acid battery type)

(2) Conventional product: UPS equipped with valve-regulated lead-acid batteries (MSE type) installed in a dedicated battery cabinet

(3) At ambient temperatures of 25°C

(4) Conventional product: SANUPS AMB double conversion online UPS

High Reliability

- Up to four 6.25 kVA UPS modules can be configured in parallel, enabling highly reliable redundant (N+1) operation.⁽⁵⁾ UPS modules can be replaced without interrupting inverter power to the load, even in the event of a fault. The system can also diagnose⁽⁶⁾ the bypass circuit during inverter operation.

Wide Input Voltage Range

- The UPS continues inverter operation even when the input voltage drops by up to 30%.⁽⁷⁾ This reduces transfers to battery operation, minimizes battery usage, and helps prevent premature battery degradation.

At load levels ≥ 80%	Within ±15% of rated voltage
At load levels < 80%	Within -30 to +15% of rated voltage

(5) Configuration with one additional UPS module beyond the capacity required to support the load

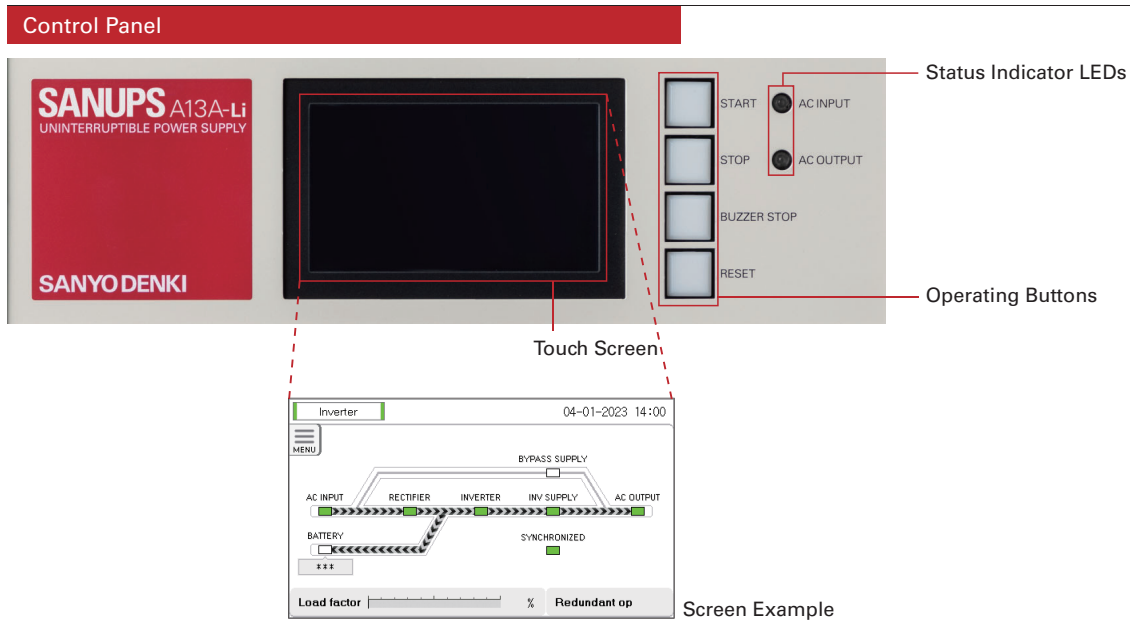
(6) Patent pending

(7) At load levels below 80%.

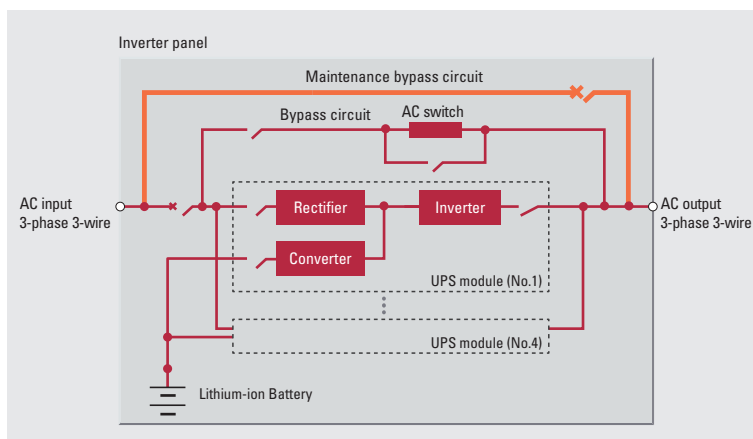
■ Inverter panel



Parallel operation	6.25 kVA / 5 kW	12.5 kVA / 10 kW	18.75 kVA / 15 kW	25 kVA / 20 kW
Parallel redundant operation	—	6.25 kVA / 5 kW	12.5 kVA / 10 kW	18.75 kVA / 15 kW



Circuit Block Diagram



By combining four UPS modules, output capacity can be expanded to up to 25 kVA or up to 18.75 kVA for parallel redundant operation. Redundant operation can be performed by having one UPS module in excess as a spare unit.

Network Options

Item	Model no.	Remarks
LAN interface card	PRLANIF032	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. The LAN interface card will be shipped installed in the UPS. 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.

Specifications

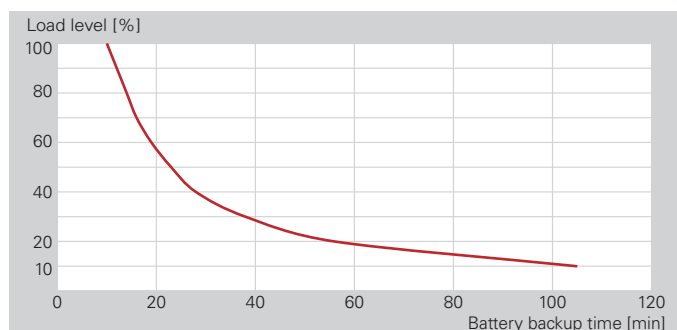
Model			A13AL622	A13AL123	A13AL183	A13AL253	Remarks	
Rated output capacity (apparent power / active power)			6.25 kVA/5 kW	12.5 kVA/10 kW	18.75 kVA/15 kW	25 kVA/20 kW		
Technology		Topology	Double conversion online					
		Cooling system	Forced air cooling					
		Rectifier	High power factor converter					
		Inverter	High-frequency PWM, instantaneous waveform control					
AC input	No. of phases/wires		3-phase 3-wire					
	Rated voltage		200/210/220 V				Same as AC output	
	Voltage range		At load levels ≥ 80%: Within ±15% of rated voltage At load levels < 80%: Within -30 to +15% of rated voltage					
	Rated frequency		50/60 Hz				To be selected at the time of order	
	Frequency range		Within ±10% of rated frequency				Operation guaranteed within this range	
	Current harmonic distortion		10% or less				At rated output	
	Input power factor		0.98 or greater				At rated output	
AC output	No. of phases/wires		3-phase 3-wire					
	Rated voltage		200/210/220 V				To be selected at the time of order	
	Voltage regulation		Within ±2% of rated voltage				In grid operation	
	Rated frequency		50/60 Hz				Same as AC input	
	Frequency regulation		Within ±0.5 % of rated frequency				At free run (asynchronous)	
	Grid synchronized range		Within ±15 % of 200/210/220 V, within ±1% of rated frequency (±1/3/5% selectable)				To be selected at the time of order	
	Voltage harmonic distortion	At linear load	Within 2%				At rated input operation	
		At rectifi er load	Within 5%				At rated input operation and at 100% rectifier load	
	Voltage unbalance		Within 2%				At 100% unbalanced load	
	Load power factor	Rated	0.8 (lagging)					
		Variation range	0.7 to 1.0 (lagging)					
	Transient voltage fluctuation ⁽¹⁾	Abrupt load change		Within ±5% of rated frequency				For 0⇔100% load step changes
		Abrupt input voltage change		Within ±2% of rated voltage				For loss/return of input power
		Output transfer		Within ±5% of rated voltage				During bypass to inverter transfer at rated output
	Overload capability	Inverter	125% (for 10 min), 150% (for 1 min)				At rated input and rated load power factor	
		Bypass	200% (for 30 s), 800% (for 2 cycles)				At rated input and rated load power factor	
Overcurrent protection			Uninterrupted transfer to bypass at approx. 150% or more				Automatic retransfer after restored to normal condition	
Acoustic noise			50 or less	50 or less	55 or less	55 or less	1 m from front of UPS, A-weighting (With a linear load)	
Heat dissipation			0.5 kW	1.0 kW	1.5 kW	2.0 kW	At rated output, after battery charging completed ⁽²⁾	
Cooling airflow			3 m³/min	6 m³/min	8 m³/min	10 m³/min	At rated output, after battery charging completed ⁽²⁾	
Battery	Type		Lithium-ion battery					
	Backup time		10 min (At 25°C ambient temperature, 0.8 load power factor, using new, fully charged batteries)					
	Total capacity		1056 Wh	2112 Wh	3168 Wh	4224 Wh		
	Expected service life		15 years (At a 25°C ambient temperature and with no more than 5,000 discharge cycles, with 70% remaining capacity. For reference purposes only.)					
Operating environment ⁽³⁾			Temperature: 0 to 40°C, humidity: 30 to 90% RH (non-condensing)					
Expected service life			15 years (At a 30°C average ambient temperature. For reference purposes only.)					

(1) Complies with the transient voltage fluctuation characteristics (classification 1) in JEC-2433:2016

(2) Calculated using conditions of the rated load power factor, a 40°C room temperature, and a 30°C outside temperature.

(3) For ambient temperatures above 40°C, the load must be derated to 80% or less.

Load Level vs Backup Time



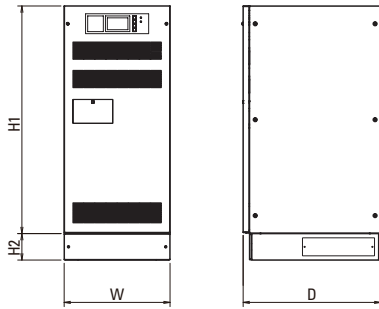
Note: At 25°C ambient temperature and load power factor of 0.8, using new, fully charged batteries.

Dimensions (Unit: mm)

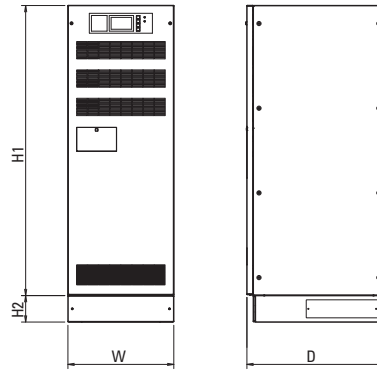
Model	Capacity	W	D	H1	H2	Mass
A13AL622	6.25 kVA	500	650	1075	125	190 kg
A13AL123	12.5 kVA	500	650	1075	125	255 kg
A13AL183	18.75 kVA	500	650	1370	125	330 kg
A13AL253	25 kVA	650	650	1545	125	420 kg

A dustproof filter (option) can be installed to the air duct of the device. Consult us for details at the time of order.

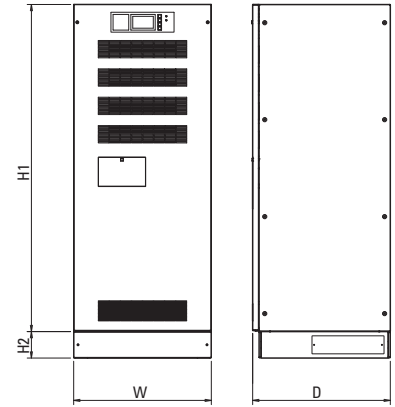
Model no.: **A13AL622 / A13AL123**



Model no.: **A13AL183**



Model no.: **A13AL253**



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