



LUMION 5000 | 20 FT CONTAINER + 2 PCS CABINETS



6058 x 2438 x 2896mm + 2 x 860x2270x1909mm



43000 kg + 2 x 1580kg

BESS SOLUTION

BESS

KEY ITEM

SPECIFICATION

Configuration	416s12p
Rated Energy	5015.9kWh
Cycle Life	>10,000 cycles @ 80% DoD
Short Peak Power	5000 kW (for 0.5P system) @60s
Rated Output Voltage	1331.2 V
Rated Input Voltage	1331.2 V
Operating Voltage Range	1164.8 V – 1500 V
Efficiency	>=93.8% @ 0.5P >=95.2% @ 0.25P
Dimension (WxDxH)	6058 mm X 2438 mm X 2896 mm
Max Weight	~43 t
Rated Power	2500 kW (0.5P)
Short Peak Power	5000 kW (for 0.5P system) @60s
Short Circuit Current	149.25 kA @ 12 strings 13.61 kA @ 1 string
Operating Ambient Temp.	-30°C to +60°C
IP Level	IP55 (Battery room) IP55 (Electric room)
Corrosion Resistance	C4/C5 for container
Heating Power	27kW
Cooling and Heating Type	Cooling and Heating Type
Refrigerating Power	60 kW @ 35°C 55 kW @ 45°C
Auxiliary Power Supply	27 kW @ 35°C 33.5 kW @ 45°C
Operating Altitude	<=3000 m (derating above)
Communication Protocol	CAN, RS485, TCP/IP
Safety Features	Gas, fire, and smoke detectors Water immersion system Aerosol extinguishing or PFH

KEY ITEM

SPECIFICATION

Storage Conditions	-20°C to 30°C, <=95% RH non-condensing
Executive Standard (Cell)	UL1973-2022, IEC62619-2022, UN38.3, UL9540A-2019, GB/T 36276-2023
Executive Standard (System)	IEC62477-2022, IEC62619-2022, IEC63056-2020, EC60730-2022, UL1973-2022, UL9540-2019, UL9540-2023, NFPA855-2023, NFPA68-2023, NFPA69-2019
Electrical Safety Standard	Complies with NFPA70
Dielectric Strength	4.5 kVDC withstand test
Cooling Performance	Centralized liquid cooling with throttling control
Mechanical Durability	Structure supports 2X lifting load, 10X ballast performance
Thermal Reliability Test	Liquid cooling pipeline tested for 1000 hours @ 60°C

PCS CONVERTER

KEY ITEM

(EACH CABINET)

SPECIFICATION

DC input	Max. DC voltage	1500Vdc
	DC voltage range	1000-1500Vdc
	Max. DC current	1403A
	Soft start	Yes
AC output (On-grid)	Rated AC output power	1250kW
	Max. AC output power	1375kVA
	Rated grid-tied voltage	690Vac 3P3W+PE
	Grid voltage range	-15%~10% (settable)
	Grid frequency range	50/60Hz
	Max. output current	1151A
	Power factor	>0.99 (at rated power)
	Adjustable power factor	1 (leading)~1 (lagging)
AC output (Off-grid)	THDi	<3% (at rated power)
	Rated AC output power	690Vac
	Output voltage accuracy	1%
	Max. output current	1151A
	THDu	<3% (liner load)
	Rated output frequency	50/60Hz
	Overload capability	110% overload



KEY ITEM
(EACH CABINET)

SPECIFICATION

Features	IP rating	IP55
	Operation temperature	-35°C~60°C (>50°C derating)
	Relative humidity	0~100% (no-condensing)
	Cooling type	Intelligent air cooling
	Dimensions (W×H×D)	860×2270×1909mm
	Weight	1580kg
	Altitude	4000m (>2000m derating)
	Display	Touch screen
	Communication interface	RS485, Ethernet
	Protocol and Compliance	Modbus-RTU, Modbus-TCP, IEC61850, IEC104, IEC EN 62477-1, EN IEC 61000-6-2/4, EN 50549-2/10, IEC 60068-2-1/2/14/30, EN 55011



— AC LINE
— DC LINE
--- COMMUNICATION LINE

