

LUNA2000-2.0MWH-1H1/2H1

Smart String ESS



More Energy



Optimal Investment



Simple O&M



Safe & Reliable

Battery Container		
Model	LUNA2000-2.0MWH-1H1	LUNA2000-2.0MWH-2H1
DC Rated Voltage	1,250 V	1,250 V
DC Max. Voltage	1,500 V	1,500 V
Nominal Energy Capacity	2,032 kWh	2,032 kWh
Charge & Discharge Rate	≤ 1 C	≤ 0.5 C
Rated Power	2,032 kW	1,016 kW
Container Configuration (W x H x D)	6,058 x 2,896 x 2,438 mm	6,058 x 2,896 x 2,438 mm
Container Weight	≤ 30 t	≤ 30 t
Operation Temperature Range	-30°C ~ 55°C	-30°C ~ 55°C
Storage Temperature Range	-40°C ~ 60°C	-40°C ~ 60°C
Relative Humidity	0 ~ 100% (Non-condensing)	0 ~ 100% (Non-condensing)
Max. Operating Altitude	4,000 m	4,000 m
Cooling Method	Smart Air Cooling	Smart Air Cooling
Configuration of HVAC	8 or 6 HVACs ¹	6 or 4 HVACs ¹
Fire Suppression Agent	FM-200 / Novec 1230™	FM-200 / Novec 1230™
Communication Interface	Ethernet / SFP	Ethernet / SFP
Communication Protocol	Modbus TCP / IEC 104	Modbus TCP / IEC 104
Protection Degree	IP55	IP55
Anti-corrosion Degree	C5-Medium	C5-Medium
Black Start	Optional	Optional

Standards Compliance

RoHS, IEC62477-1, IEC62040-1, IEC61000-6-2, EN55011, UL9540A, IEC62619, UN3536, etc.

¹ - The quantity of HVACs depends on C rate and application scenario

LUNA2000-1.0MWH-1H1

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Battery Container

Model	LUNA2000-1.0MWH-1H1
DC Rated Voltage	1,250 V
DC Max. Voltage	1,500 V
Nominal Energy Capacity	1,016 kWh
Rated Power	1,016 kW
Container Configuration (W x H x D)	6,058 x 2,896 x 2,438 mm
Container Weight	≤ 20 t
Operation Temperature Range	-30°C ~ 55°C
Storage Temperature Range	-40°C ~ 60°C
Relative Humidity	0 ~ 100% (Non-condensing)
Max. Operating Altitude	4,000 m
Cooling Method	Smart Air Cooling
Configuration of HVAC	3 HVACs
Fire Suppression Agent	FM-200 / Novec 1230™
Communication Interface	Ethernet / SFP
Communication Protocol	Modbus TCP / IEC 104
Protection Degree	IP55
Anti-corrosion Degree	C5-Medium
Black Start	Yes

Standards Compliance

RoHS, IEC62477-1, IEC62040-1, IEC61000-6-2, EN55011, UL9540A, , IEC62619, UN3536, etc.

Battery Pack & Smart Rack Controller

Smart String ESS



Battery Pack

General

BESS Model	LUNA2000-2.0MWH-1H1/2H1 LUNA2000-1.0MWH-1H1
Cell Material	LFP
Pack Configuration	18S 1P
Rated Voltage	57.6 V
Nominal Capacity	280 Ah / 16.13 kWh
Weight	≤ 140 kg
Dimensions (W x H x D)	442 x 307 x 660 mm



Smart Rack Controller

Battery Side

Rated Voltage	1,209.6 V
Operating Voltage Range	40 V ~ 1,400 V
Rated Power Voltage Range	1,075 V ~ 1,320 V
Min. Start Voltage	350 V

Bus Side

Max. DC Voltage	1,500 V
Rated Voltage	1,250 V
Rated Current	275.2 A
Rated Power	344,000 W

General

Dimensions (W x H x D)	600 x 270 x 820 mm
Weight	≤ 90 kg
Cooling Method	Smart Air Cooling
Protection Degree	IP66

LUNA2000-200KTL-H1 Smart PCS



Max. Efficiency 99%



Modular Design



IP66 Protection



Surge Arresters for
DC & AC

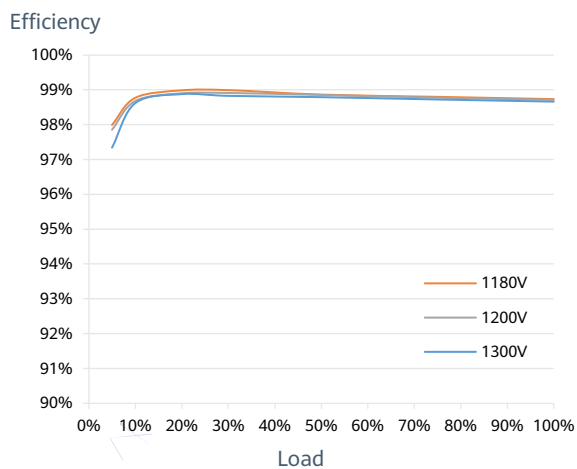


Ethernet
Communication

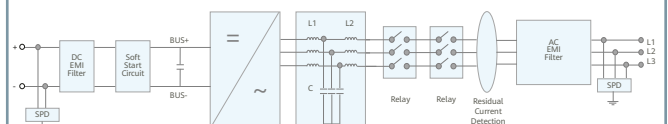


Smart Grid
Algorithm

Efficiency Curve



Circuit Diagram



LUNA2000-200KTL-H1

LUNA2000-200KTL-H1
Technical Specifications

Model	LUNA2000-200KTL-H1	
Efficiency		
Max. Efficiency	99.0%	
DC Side		
Rated DC Voltage	1,180 V	
Max. DC Voltage	1,500 V	
Operating DC Voltage Range	1,180 V ~ 1,500 V	
Max. DC Current	207.6 A	
Max. Number of Inputs	1	
AC Side		
Rated AC Active Power	200,000 W @40°C	
Rated AC Voltage	800 V	
Rated AC Grid Frequency	50 Hz / 60 Hz	
Max. AC Current	173.2 A	
Adjustable Power Factor Range	-1 ... +1	
Max. Total Harmonic Distortion	THD _i < 1% (Rated)	
Black Start	-	Yes
Protection		
AC Overcurrent Protection	Yes	
DC Reverse-polarity Protection	Yes	
Insulation Resistance Detection	Yes	
Residual Current Protection	Yes	
DC Surge Protection ¹	Type II	
AC Surge Protection ¹	Type II	
Communication		
Display	LED Indicator; USB data cable + APP	
USB	Yes	
Ethernet	Yes	
General		
Dimensions (W x H x D)	875 x 820 x 365 mm	
Weight	< 99 kg	
Operating Temperature Range	-25°C ~ 60°C	
Cooling Method	Smart Air Cooling	
Max. Operating Altitude without Derating	4,000 m	
Relative Humidity	0 ~ 100% (Non-condensing)	
DC Connector	OT / DT Terminal	
AC Connector	OT / DT Terminal	
Protection Degree	IP66	
Anti-corrosion Degree	C5-Medium	
Topology	Transformerless	
Standards Compliance		
RoHS, IEC 62477-1, IEC 61000-6-2, IEC 61683, VDE 4120, EN 50549, etc.		

¹ - Compatible Type II protection class according to IEC / EN 61643-11

