

LUNA2000-200KWH-2H1 Smart String ESS



More Energy



Simple O&M



Safe & Reliable

Energy Storage System Parameters

Energy storage system configuration	(18 S 1 P) 12S
Rated voltage on the DC side	691 V
Maximum battery capacity of the energy storage system	193.5 kWh
Rated Power	100 kW
Dimensions (W x H x D), including DC/DC	2570 x 2100 x 950 mm
Weight of the energy storage system	< 2.75 t
Operating temperature range	-30 °C ~ 55 °C
Storage temperature range	-40 °C ~ 60 °C
Operating humidity range	0 ~ 100% (non-condensing)
Maximum operating altitude	4,000 m
Battery temperature control mode	Industrial-grade air conditioner
Fire suppression of energy storage system	YES
Communication port	Ethernet / SFP
Communication protocol	Modbus TCP / IEC104
Protection degree	IP55
Salt-mist-resistant	C5-M
Standards	
Environment	RoHS6

Battery Pack & Smart Rack Controller

Smart String ESS



Battery Pack	
General	
Cell Material	LFP
Pack Configuration	18S 1P
Rated Voltage	57.6 V
Nominal Capacity	280 Ah / 16.12 kWh
Supported Charge & Discharge Rate	≤ 0.5 C
Weight	≤ 140 kg
Dimensions (W x H x D)	442 x 307 x 660 mm



Smart Rack Controller	
Efficiency	
Max. Efficiency	99.0%
Battery Side	
Rated Voltage	691 V
Operating Voltage Range	40 V ~ 1,100 V
Rated Power Voltage Range	340 V ~ 790 V
Min. Start Voltage	350 V
Bus Side	
Max. DC Voltage	1,100 V
Rated Voltage	645 V
Rated Current	155 A
Rated Power	100,000 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

LUNA2000-100KTL-M1 Smart PCS



Max. Efficiency 99%



Modular Design



IP66 Protection



Surge Arresters for DC & AC

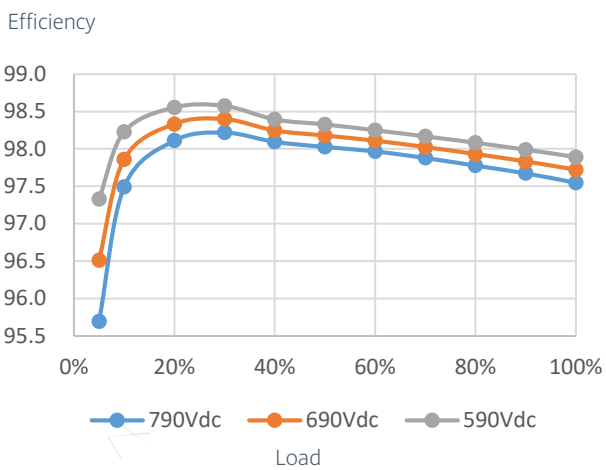


Ethernet Communication

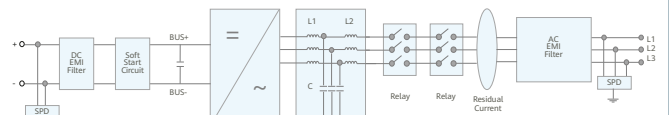


Smart Grid Algorithm

Efficiency Curve



Circuit Diagram



LUNA2000-100KTL-M0

LUNA2000-100KTL-M1

Technical Specifications

Efficiency	
Max. Efficiency	98.5%
DC Side	
Rated DC Voltage	645 V
Max. DC Voltage	1,100 V
Operating DC Voltage Range	570 V ~ 1100 V
Max. DC Current	215.8 A
Max. Number of Inputs	1
AC Side	
Rated AC Active Power	100,000 W @40°C
Rated AC Voltage	380 V / 400 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	< 3%
Protection	
Anti-islanding Protection	Yes
AC Overcurrent Protection	Yes
DC Reverse-polarity Protection	Yes
Insulation Resistance Detection	Yes
Earth Fault Protection	Yes
Residual Current Protection	Yes
DC Surge Protection ¹	Type II
AC Surge Protection ¹	Type II
Communication	
Display	LED Indicators, WLAN + APP
USB	Yes
RS485	Yes
Ethernet	Yes
General	
Dimensions (W x H x D)	875 x 820 x 365 mm
Weight	< 95 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%
DC Connector	Waterproof connector + OT/DT Terminal
AC Connector	Waterproof connector + OT/DT Terminal
Protection Degree	IP66
Topology	Transformerless

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