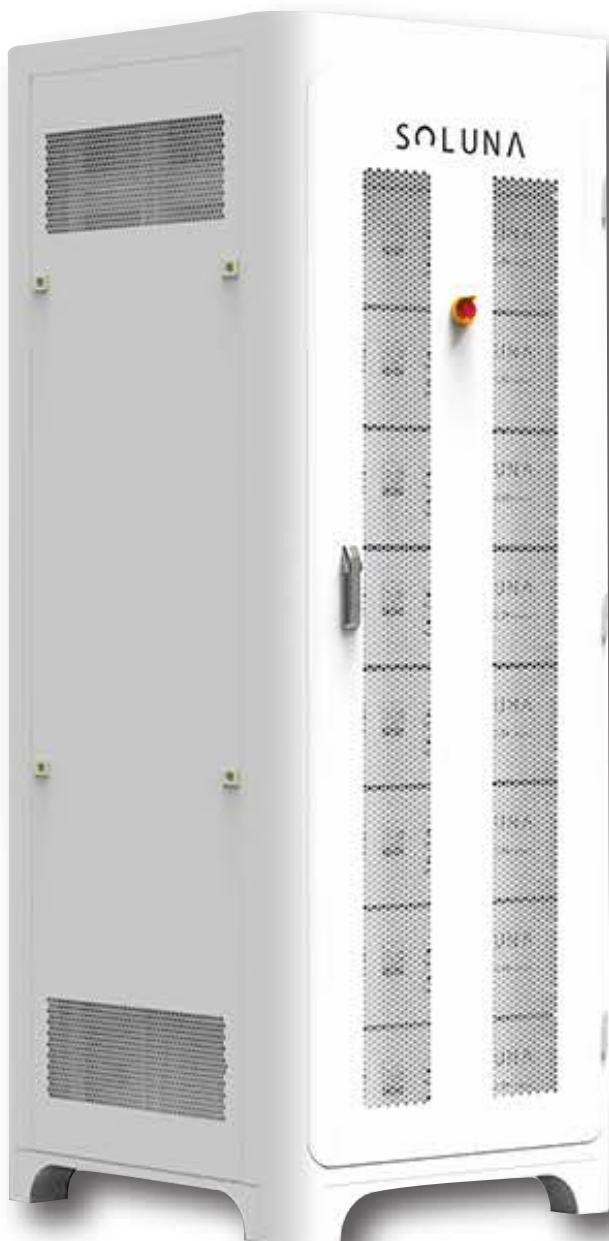


POWER CELL TECHNICAL SPECS

The Soluna Power Cell is designed for robust applications providing daily energy storage and back-up power for commercial properties, farmsteads and rural businesses where high electricity bills and blackouts simply cannot be tolerated.



POWER

AC Power	50 kW
AC Voltage	380VAC / 400VAC / 415VAC
PV MPPT Voltage	520-800 VDC
Battery Type	LFP
Capacity	100 kWh
Battery Voltage	336-432 VDC
Max Charge/Discharge	150 A
Cycles	6000
DOD	80%
Operating Temperature	-10° to 45°C / 14°F to 113°F
Certification	Cell: UL1642
Module	Refer to UN38.3, UL1973 and IEC62619 design
Weight	TBD
Dimensions	TBC
Warranty	10 Years Warranty



POWER CELL SYSTEM SPECIFICATION

PV INPUT

Vmax PV	900V d.c
Isc PV (absolute Max.)	220A
Number MPP trackers	1
Number input strings	1
Max. PV input current	100
MPPT voltage range	520-800Vdc
Vdc range @ full power	520-800Vdc

AC INPUT AND OUTPUT

Normal Voltage	400VAC,3 phase(L1/L2/L3/N/PE)
Voltage range	400VAC±10%
Frequency	50/60Hz (±2.5Hz)
Max. AC output current	72A
Max. AC input current	72A
Max. continuous Power	50kW
Overload capability	105%~115% rated load (10min) 115%~125% rated load (1min) 125%~150% rated load (200ms)
Output THDI	≤3%
Power factor range	-1~+1

OFF-GRID AC OUTPUT

Normal Voltage	400VAC,3 phase(L1/L2/L3/N/PE)
Output Voltage range	400VAC±10%
Frequency	50/60Hz (±2.5Hz)
Max. AC output current	72A
Max. continuous Power	50kW
Overload capability	105%~115% rated load (10min) 115%~125% rated load (1min) 125%~150% rated load (200ms)
Power factor range	-1~+1

BATTERY DATA

Battery type	LFP
Nominal Storage capacity (kWh)	100
Usable Storage Capacity (kWh)	80
Battery capacity (Ah)	271
Normal voltage (V)	384
Voltage range (V)	336~432
Max. charge current (A)	150
Max. discharge current (A)	150
DOD	80%
Cycle life	6000

OTHERS

Ingress protection	IP 20
Protection	OTP, AC OVP/UVP, OFP/UFP, EPO, AC Phase Reverse, Fan/Relay Failure, OLP, GFDI, Anti-islanding
Configurable protection limits	Upper/Lower AC Voltage/Frequency limit, Battery EOD voltage
AC connection	3P4W
Display	Touch Screen
Communication	RS485,CAN,Ethernet
Isolation	Built-in Transformer
Working temperature	-10°C-50°C (derating over 45°C)
Overvoltage category	OVC II(PV) , OVCIII(AC main Grid)
Cooling Concept	Forced cooling
Noise	<70dB
Humidity	0% ~ 95 %
Altitude	<3000m
Dimensions(mm)	TBD
Weight(kg)	TBD