



LITHIUM-ION BATTERIES

INV-LV-IP21 5.1
INV-LV-IP21 11.8
INV-LV-IP21 16



Comprehensive Protection

- Advanced BMS with active fuse

Optimized Energy Density

- Integrated PACK: reduced line loss, enhanced energy density

Easy Maintenance

- Auto-networking (No DIP switches), Local monitoring mode for battery, remote monitoring mode for ESS

Superior Performance

- Support Max. 1C charge & 1.2C discharge (INV-LV-IP21 5.1), GaN MOSFETs: 50% loss reduction, high-temp resistance

Flexible Expansion

- Max. 32 units in parallel

Reliable Durability

- Operates reliably in -20°C to 55°C, natural cooling



Model	INV-LV-IP21 5.1	INV-LV-IP21 11.8	INV-LV-IP21 16
Main Parameters			
Battery Chemistry	LiFePO ₄		
Capacity	100 Ah	230 Ah	314 Ah
Scalability	Max. 32 pcs in parallel		
Nominal Voltage ^[1]	51.2 V		
Operating Voltage	44.8 V ~ 57.6 V		
Nominal Energy	5.12 kWh	11.8 kWh	16 kWh
Charge Current ^[2]	Max. Continuous	100 A	230 A
	Peak	120 A (10 sec)	280 A (10 sec)
Discharge Current ^[2]	Max. Continuous	120 A	230 A
	Peak	150 A (10 sec)	280 A (10 sec)
Other Parameter			
Recommend Depth of Discharge	90% DoD		
Dimension (W × H × D) (Without hanging board)	370 × 548 × 140 mm	400 × 559 × 233 mm	400 × 708 × 233 mm
Weight Approximate	41 kg	84 kg	109 kg
LED Indicator	LED (SOC, working, protecting) & Buzzer		
IP Rating of Enclosure	IP21		
Operating Temperature	Charge: -10~55°C / Discharge: -20~55°C	Charge: 0~55°C / Discharge: -20~55°C	
Storage Temperature	0~35°C		
Relative Humidity	95% (non-condensing)		
Altitude	≤3000m		
Cycle Life	≥6000(25°C±2°C,70%EOL)		
Installation	Wall-Mounted, Floor-Mounted, Stack-Mounted		
Communication	CAN2.0, RS485, Bluetooth+APP		
Warranty Period ^[3]	10 years (5 years product warranty + 5 years service warranty)		
Energy Throughput ^[3]	16 MWh	18 MWh	25 MWh
Certification	UN38.3, MSDS, CE, CB		

[1] Test conditions : 25°C±2°C, at beginning of life and calibration mode, 0.5C discharge, 100% DOD.

[2] The current is affected by temperature and SOC.

[3] Conditions apply, refer to Inverex Warranty Letter.



Product comparison

Model	Nominal Energy	Charge / Discharge C rate	DoD	Size
INV-LV-IP21 5.1	5.12kWh, 51.2V, 100Ah	1C/1.2C	90%	370 x 548 x 140 mm
INV-LV-IP21 11.8	11.8kWh, 51.2V, 230Ah	1C/1C	90%	400 x 583 x 233 mm
INV-LV-IP21 16	16kWh, 51.2V, 314Ah	0.5C/0.7C	90%	400 x 708 x 233 mm

Mounting example

Stacked

Supports 6 layers in series (4 layers for INV-LV-IP21 16), allows multiple clusters in parallel



Wall mounted

All support wall mounted installation, and support for multiple packs in parallel

