



Inverter Mode Specifications	
Model	IVEM6048-II
Rated Output Power	6000VA
	6000W
Nominal DC Input Voltage	48V
Output Voltage Waveform	Pure sine wave
Nominal Output Voltage	230Vac±5%
Nominal Output Frequency (Hz)	50±0.3Hz/60Hz±0.3Hz (Adjustable)
Parallel capability	Yes, up to 12 units
Peak Efficiency	93%
Over-Load Protection (SMPS load)	Load >200%, 200ms / Load >150%, 5.5s Load >120%, 7.5s / Load >105% 10.5s
Surge Rating	2* rated power for 5s
Capable of Starting Electric	Yes
Output Short Circuit Protection	Yes
Cold Start Voltage	46V
Low Battery Alarm Load < 50% @Load ≥ 50%	45.0V 44.0V
Low Battery Alarm Recovery Load < 50% @Load ≥ 50%	47.0V 46.0V
Low DC Input Shut-down Load < 50% @Load ≥ 50%	43.0V 42.0V
High DC Input Alarm & Fault	62V±0.4V
High DC Input Recovery	60V±0.4V
General Specifications	
Operating Temperature	-10C°~50C°
Range Storage Temperature	-15C°~60C°
Net Weight (Kg)	12.5kg
Product Size (D*W*H)	420 x 335 x 142mm
Package Dimension (D*W*H)	512 x 417 x 216mm

Model	FLA48100	FLA48200
Battery Type	LiFePO4	
Nominal Energy	5.12kWh	10kWh
Nominal Voltage	51.2V	51.2V
Operating Voltage	44.8-57.6V	44.8-57.6V
Recommend Charge/Discharge Current[1]	≤100A	≤120A
Recommend Charge/Discharge Power[1]	≤5,000W	≤6,000W
Maximum Charge/Discharge Current(15s)	150A	150A
Maximum Charge/Discharge Power(15s)	7,500W	7,500W
Scalability	Max. 15 pcs in Parallel(76.8kWh)	Max. 15 pcs in Parallel(150kWh)
Depth of Discharge(DOD)	≥95%	
Communication	RS485/CAN	
Protection Degree	IP21	
Cycle Life	≥ 6000 Cycles (25°C±2°C,0.5C/0.5C,90%DOD,70%EOL)	
Charging Temperature Range	0°C~+55 °C	
Discharging Temperature Range	-20°C~+55 °C	
Display Type	LCD+LED	
Installation	Wall-Mounted / Floor-Mounted	
Protection	Built-in smart BMS, Breaker, Fuse	
Warranty Period	7 Years	
Certification	UN38.3、CE-EMC、 IEC 62619	UN38.3、CE-EMC、 IEC 62619、CB
Product Weight	48KG	68KG
Package Weight	55KG	88KG
Product Dimension	663X400X178MM	735X433X188MM
Package Dimension	782X522X262MM	849X550X362MM

[1] Max. Continuous Charge/Discharge Current is Affected by Temperature and SOC.

*Product specifications may vary during continuous improvements. Please contact us for latest details.

*Refer to Felicitysolar's Warranty Policy for applicable conditions.



Mechanical Characteristics

Cell Type	N- type Mono-crystalline
No. of cells	144 (72×2)
Dimensions	2278×1134×30 mm
Weight	31.0 kg
Front Glass	2.0 mm, Anti-reflection Coating
Back Glass	2.0 mm, Heat Strengthened Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68 Rated
Protection Class	Class II
IEC Fire Type	Class C
Connector Type	JK03M / JK03M2 / Others*
Output Cables (Including Connector)	4.0 mm ² (+): 400 mm , (-): 200 mm or Customized Length

* MC4 and MC4-EVO2 available upon request and subject to availability

Packaging Configuration

Pallet Dimensions	2338×1140×1251mm
Packing Detail (Two pallets = One stack)	36 pcs/pallets, 72 pcs/stack, 720 pcs/ 40'HQ Container

Specifications (STC)

Maximum Power - Pmax [Wp]	575	580	585	590	595	600
Maximum Power Voltage - Vmp [V]	43.73	43.88	44.02	44.17	44.31	44.45
Maximum Power Current - Imp [A]	13.15	13.22	13.29	13.36	13.43	13.50
Open-circuit Voltage - Voc [V]	52.30	52.50	52.70	52.90	53.10	53.30
Short-circuit Current - Isc [A]	13.89	13.95	14.01	14.07	14.13	14.19
Module Efficiency STC [%]	22.26	22.45	22.65	22.84	23.03	23.23
Power Tolerance	0 ~ + 3 %					
Temperature Coefficients of Pmax	-0.29 %/°C					
Temperature Coefficients of Voc	-0.25 %/°C					
Temperature Coefficients of Isc	0.045 %/°C					

STC: Irradiance 1000W/m², Cell Temperature 25°C, AM=1.5

Specifications (BNPI)

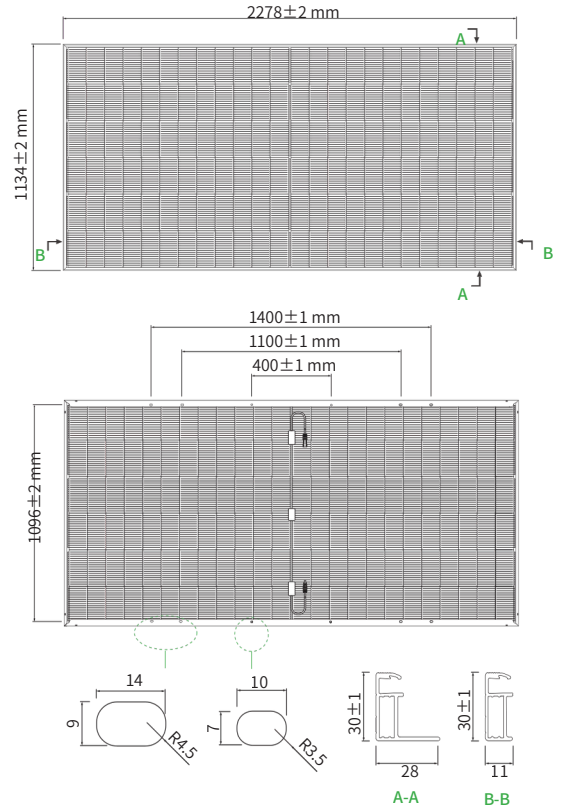
Maximum Power - Pmax [Wp]	633	638	644	649	655	660
Maximum Power Voltage - Vmp [V]	43.84	44.00	44.17	44.33	44.50	44.66
Maximum Power Current - Imp [A]	14.44	14.50	14.58	14.64	14.72	14.78
Open-circuit Voltage - Voc [V]	52.33	52.53	52.73	52.93	53.13	53.33
Short-circuit Current - Isc [A]	15.19	15.25	15.31	15.37	15.43	15.49

BNPI: Irradiance: front 1000W/m², rear 135W/m², Cell Temperature 25°C, AM=1.5

Application Conditions

Operating Temperature	-40 °C ~ +70 °C
Maximum System Voltage	1500 VDC (IEC)
Maximum Series Fuse Rating	30 A
Bifaciality Coefficient	φVoc: 98±5 %, φIsc: 80±5 %, φPmax: 80±5 %

Engineering Drawings



Note: For specific dimensions and tolerance ranges, please refer to the corresponding detailed module drawings.

Electrical Performance

