



Model	IVEM12048-II
Line Mode Specifications	
Rated Output Power(VA)	12000VA
Rated Output Power(W)	12000W
Nominal DC Input Voltage	48V
Nominal Input Voltage	230Vac
Max. AC Input Voltage	280Vac
Nominal Input Frequency	50Hz / 60Hz (Auto Detection)
Efficiency(Line Mode)	>95% (Rated R Load, Battery Full Charged)
Pass Through Without Battery	Yes
Utility Charge Mode Specifications	
Input Voltage Range	230Vac
Over Charge Protection	90-280Vac
Max. Charge Current	240A
Charge Current Regulation	10-240A (Adjustable Unit is 1A)
Over Charge Protection	Yes
Solar Charging & Grid Charging	
Max.PV Open Circuit Voltage	500V
PV Voltage Working Range	90V-450V
Max. Input Power	15000W(7500W for Single PV)
Max. Solar Charging Current	240A
Max. Charging Current(PV+Grid)	240A
Max. Input Current	27A X 2(MAX 54A)
Min. Startup Voltage	100V
Inverter Mode Specifications	
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 6 units
Peak Efficiency	94.5%
Over-Load Protection(SMPS load)	5s@≥150% load; 10s @105% ~150% load
Surge Rating	2* rated power for 5s
Capable of Starting Electric	Yes
Output Short Circuit Protection	Yes
General Specifications	
Operating Temperature	-10°C~50°C
Range Storage Temperature	-15°C~60°C
Net Weight(KG)	26.8KG
Product Dimension(MM)	634*476*141MM
Package Dimension(MM)	726*594*258MM

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

2.3 Specifications

Model	FLA48300
Capacity	15kWh
Battery Type	LiFePO4
Nominal Voltage	51.2V
Operating Voltage	44.8-57.6V
Recommend Charge/Discharge Current[1]	≤150A
Recommend Charge/Discharge Power[1]	≤7,500W
Maximum Charge/Discharge Current(15s)	200A
Maximum Charge/Discharge Power(15s)	10,000W
Depth of Discharge(DOD)	≥ 95%
Scalability	Up to 15 units in parallel(225kWh)
Communication	RS485 / CAN
Protection Level	IP21
Cycle Life[2]	≥ 6,000 Cycles
Charging Temperature Range	0-55 °C
Discharging Temperature Range	-20-55 °C
Display	LCD+LED
Installation	Floor-Mounted
Protection	Built-in smart BMS, Breaker, Fuse
Warranty	7 Years
Net Weight	135kg
Gross Weight	160kg
Product Dimension	480x1100x300mm
Package Dimension	1150x635x498mm
[1] Recommend charge/discharge current/power is affected by temperature and SOC.	
[2] Test conditions: 0.2C Charging/Discharging @25°C, 80% DOD.	



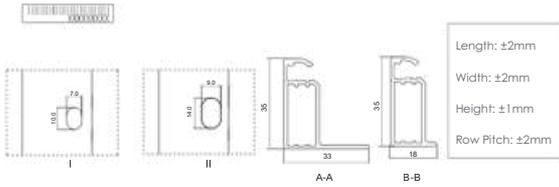
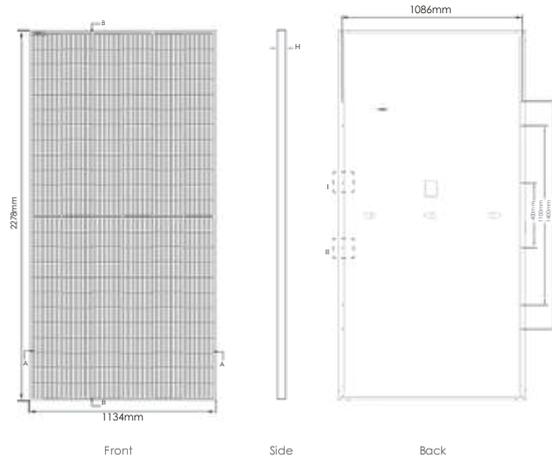
2.4 Recommended Settings

Lithium battery pack is not same as lead-acid battery, so for the devices which you connect with the battery pack for charging or discharging, such as inverters, MPPT charger controllers or UPS, please implement pre-settings as recommended settings as below before you launched them.

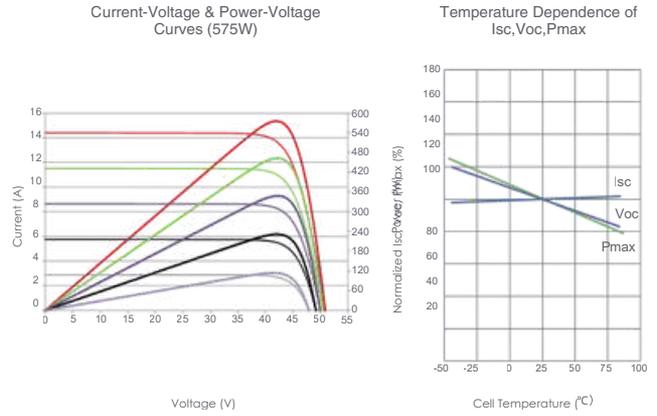
Setting	FLA48300
Max. Charging Voltage	57.6V
Floating Charging Voltage	57.6V
Max. Charging Current	150A*N
Cut-off Voltage	48V

Notes: "N" means the number of battery packs connected in parallel.

Engineering Drawings



Electrical Performance & Temperature Dependence



Mechanical Characteristics

Cell Type No.	Ntype Mono-crystalline
of cells	144 (6×24)
Dimensions	2278×1134×35mm (89.69×44.65×1.38 inch)
Weight	28 kg (61.73 lbs)
Front Glass	3.2mm, Anti-Reflection Coating, High Transmission, Low Iron, Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68 Rated
Output Cables	TUV 1×4.0mm ² (+): 400mm, (-): 200mm or Customized Length

Packaging Configuration

(Two pallets = One stack)

31 pcs/pallets, 62 pcs/stack, 620 pcs/ 40'HQ Container

SPECIFICATIONS

Module Type	JKM565N-72HL4		JKM570N-72HL4		JKM575N-72HL4		JKM580N-72HL4		JKM585N-72HL4	
	JKM565N-72HL4	JKM565N-72HL4-V	JKM570N-72HL4	JKM570N-72HL4-V	JKM575N-72HL4	JKM575N-72HL4-V	JKM580N-72HL4	JKM580N-72HL4-V	JKM585N-72HL4	JKM585N-72HL4-V
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	565Wp	425Wp	570Wp	429Wp	575Wp	432Wp	580Wp	436Wp	585Wp	440Wp
Maximum Power Voltage (Vmp)	41.92V	39.38V	42.07V	39.51V	42.22V	39.60V	42.37V	39.69V	42.52V	39.81V
Maximum Power Current (Imp)	13.48A	10.79A	13.55A	10.85A	13.62A	10.92A	13.69A	10.99A	13.76A	11.05A
Open-circuit Voltage (Voc)	50.60V	48.06V	50.74V	48.20V	50.88V	48.33V	51.02V	48.46V	51.16V	48.60V
Short-circuit Current (Isc)	14.23A	11.49A	14.31A	11.55A	14.39A	11.62A	14.47A	11.68A	14.55A	11.75A
Module Efficiency STC (%) Operating	21.87%		22.07%		22.26%		22.45%		22.65%	
Temperature (°C)	-40°C ~ +85°C									
Maximum system voltage	1000/1500VDC (IEC)									
Maximum series fuse rating	25A									
Power tolerance	0~+3%									
Temperature coefficients of Pmax	-0.29%/°C									
Temperature coefficients of Voc	-0.25%/°C									
Temperature coefficients of Isc Nominal	0.045%/°C									
operating cell temperature (NOCT)	45±2°C									