



<b>Model</b>	<b>IVEM12048-II</b>
<b>Line Mode Specifications</b>	
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
<b>Utility Charge Mode Specifications</b>	
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
<b>Solar Charging &amp; Grid Charging</b>	
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
<b>Inverter Mode Specifications</b>	
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
<b>General Specifications</b>	
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.

## Apéndice I

Modelo	FLA48280-EU
Energía	14,3kWh
Tipo de batería	LiFePO4
Tensión nominal	51,2 V
Tensión de funcionamiento	44,8-57,6 V
Corriente máxima de carga/descarga continua[1]	150 A
Corriente máxima de carga/descarga (15 s)	300 A
Potencia máxima de carga/descarga	7500 W
Profundidad de descarga (DOD)	≥ 95%
Escalabilidad	Hasta 15 unidades en paralelo (214,5 kWh)
Comunicación	RS485 / CAN
Nivel de protección	IP21
Ciclo de Vida	≥ 6000 Ciclos
Rango de temperatura de carga	0-55 °C
Temperatura de descarga	-20-55 °C
Pantalla	LCD+LED
Instalación	Montado en el suelo
Protección	BMS Inteligente Incorporado, Interruptor, Fusible
Garantía	10 Años
Peso neto	135 kg
Peso Bruto	160 kg
Dimensiones del producto	480 × 1100 × 300 mm
Dimensiones del paquete	1150 × 635 × 498 mm
[1] La corriente máxima de carga/descarga continua se ve afectada por la temperatura y el SOC.	

\* En ausencia de comunicación, siga los ajustes recomendados en la tabla siguiente.

Ajuste	FLA48280-EU
Tensión de carga máxima	57,6 V
Tensión de carga flotante	57,6 V
Corriente de carga máxima	150 A x N
Tensión de desconexión	48 V

Notas: "N" significa el número de baterías conectadas en paralelo.



## 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 <sup>2</sup> (+): 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/m<sup>2</sup>, Cell Temperature 25°C, AM=1.5

## Specifications (BNPI)

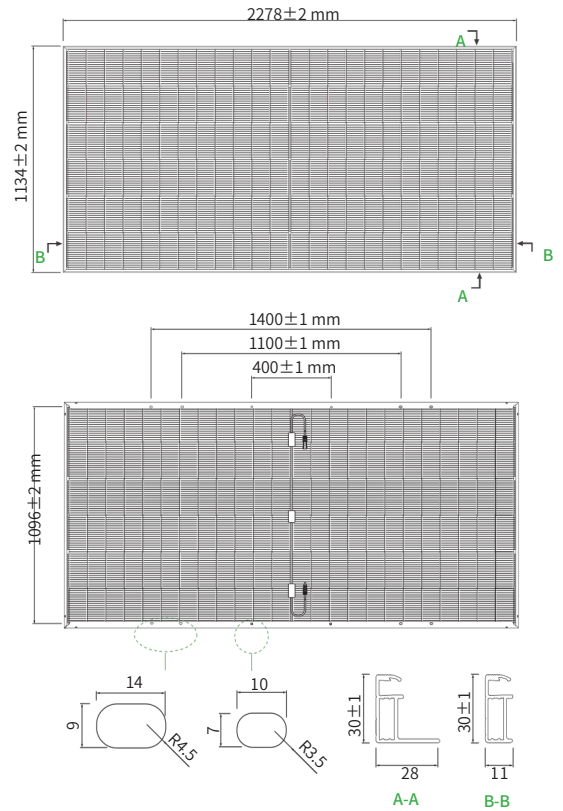
Maximum Power - Pmax [Wp]	633	638	644	649	655	660
Maximum Power Voltage - Vmp [V]	43.84	44.00	44.17	44.33	44.50	44.66
Maximum Power Current - Imp [A]	14.44	14.50	14.58	14.64	14.72	14.78
Open-circuit Voltage - Voc [V]	52.33	52.53	52.73	52.93	53.13	53.33
Short-circuit Current - Isc [A]	15.19	15.25	15.31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

BNPI: Irradiance: front 1000W/m<sup>2</sup>, rear 135W/m<sup>2</sup>, 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

