



# HEPA SOLAR

US 11 | 2023

## SELF-SUFFICIENT POWER SYSTEM

### The Original

Highest quality solar panels, battery storage and microinverters for industrial and domestic use

UNPACK  
—  
OPEN  
—  
CONNECT  
—  
DONE

MAXIMUM  
EFFICIENCY  
AND 30-YEAR  
PERFORMANCE  
GUARANTEE



[www.hepa-solar.com](http://www.hepa-solar.com)



# TABLE OF CONTENTS

---

About Hepa Solar .....	03
------------------------	----

## SELF-SUFFICIENT POWER SYSTEM

HEPA PREMIUM 800 W. ....	04
HEPA PRO 400 W. ....	08
HEPA BASIC. ....	12
Including balcony mounting hardware .....	13

## BATTERY STORAGE

HEPA ISOLATED SOLUTION .....	15
HEPA S 1500 W. ....	16
HEPA S 650 W .....	20

## ACCESSORIES

Balcony brackets, roof brackets, cables. ....	22
---	----

## MICRO-INVERTER

HEPA M 400 W. ....	24
HEPA M 800 W. ....	25

System Options .....	26
The industry’s best system. ....	28
Why is HEPA SOLAR is committed to HJT Technology?. ....	30

# ABOUT HEPA SOLAR

HEPA SOLAR is an innovative, German company with a mission to provide easy access to renewable energy and make it affordable to everyone.

Anyone can be a part of this, regardless of their budget. We have our own factory where we manufacture our high-quality modules. Our professional team of engineers, workers and industrial designers are highly skilled, motivated and open to ideas and new developments.

Every single product goes through strict QC processes in order to guarantee the highest possible quality and customer satisfaction. On the one hand, HEPA Solar supplies wholesalers with direct delivery and also has a warehouse in northern Germany, from where many customers are being provided with supplies. This allows us to be more cost effective and also guarantees the best price for our customers.



# HEPA PREMIUM 800 W – SELF-SUFFICIENT POWER SYSTEM

---

## SET UP – CONNECT – SAVE POWER

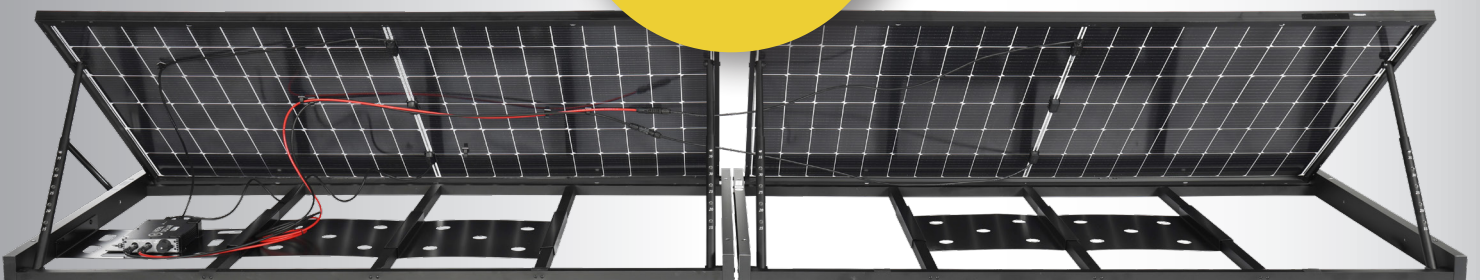
The innovative HEPA PREMIUM complete power system is equipped with 2 of the industry's highest quality glass-glass HJT panels with 25.2% cell efficiency and a 30-year performance guarantee. It is installed in a unique fold-out frame, which can be adjusted in angle for optimal inclination in just two simple steps.

The HEPA PREMIUM complete power system is delivered fully assembled, including a pre-installed 800W micro inverter and a 16ft connection cable with plug. It is packaged in a cardboard box and is set up and ready to use within a few minutes. It just needs to be plugged into the nearest outlet and it will deliver 800 watts directly to your home grid under the right weather conditions. That means your electric meter will run slower from that point on and your electricity consumption will be reduced. Simply place it in the garden, on your garage/carport or wherever you can find space and you will instantly reduce your energy costs.

The high-quality anodized aluminum frame can be weighted down with pavers, mounted with four screws to the surface or against a wall. All necessary drillings, as well as the required wall anchors are provided. Through the built-in Wi-Fi feature on the microinverter, you can monitor the power at any time with the free app on your smartphone.

**MORE  
SAVINGS**

**DOUBLE  
POWER**





**HEPA PREMIUM 800 W**  
 EAN: 4262400980269  
 SKU: 22030007

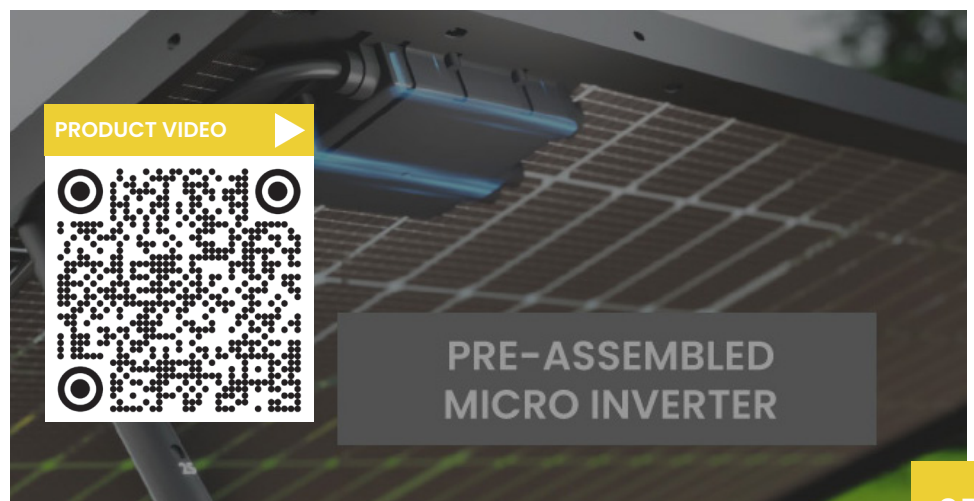


**KEY DATA**

- Easy wall mounting
- Angle is adjustable for inclination
- Incl. insertion plate for weigh down pavers
- Pre-wired with plug
- 800W micro inverter pre-assembled
- Quality design / Full Black module with black anodized aluminum frame
- 2 HJT glass-glass modules, 25.2% efficiency of the cells
- Low costs due to simple installation
- Only partial shutdown under shade conditions
- Easy expansion via plug and play

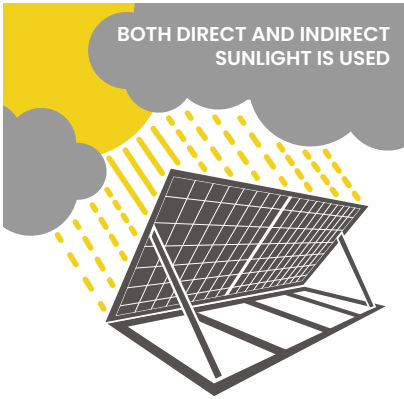
**PACKAGE DIMENSIONS**

- Complete independent power system
- 16ft connection cable with plug
- Wall anchor for installation on the wall
- Insert plate for weighting

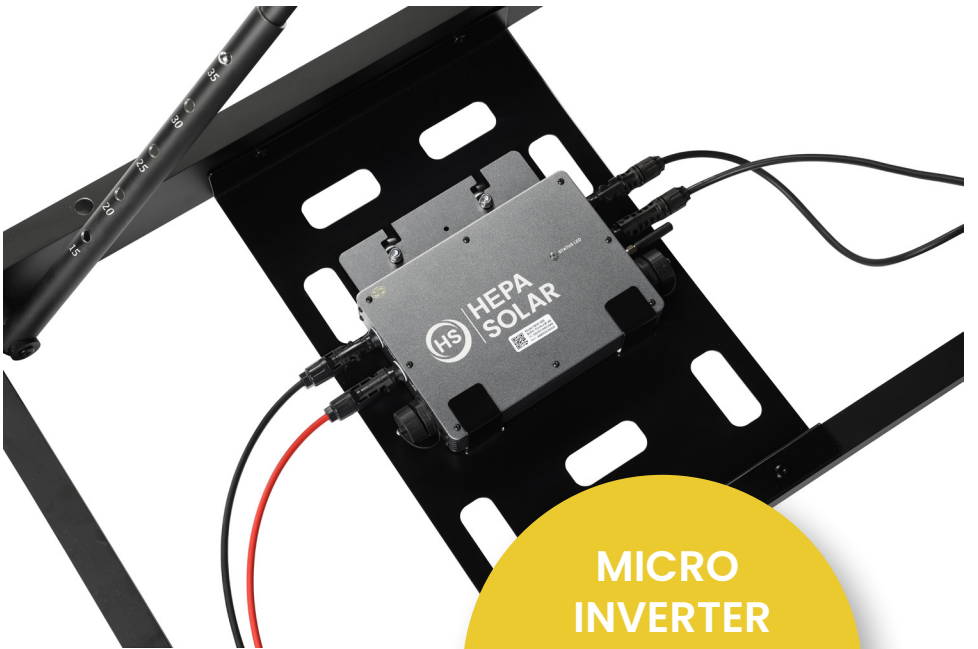
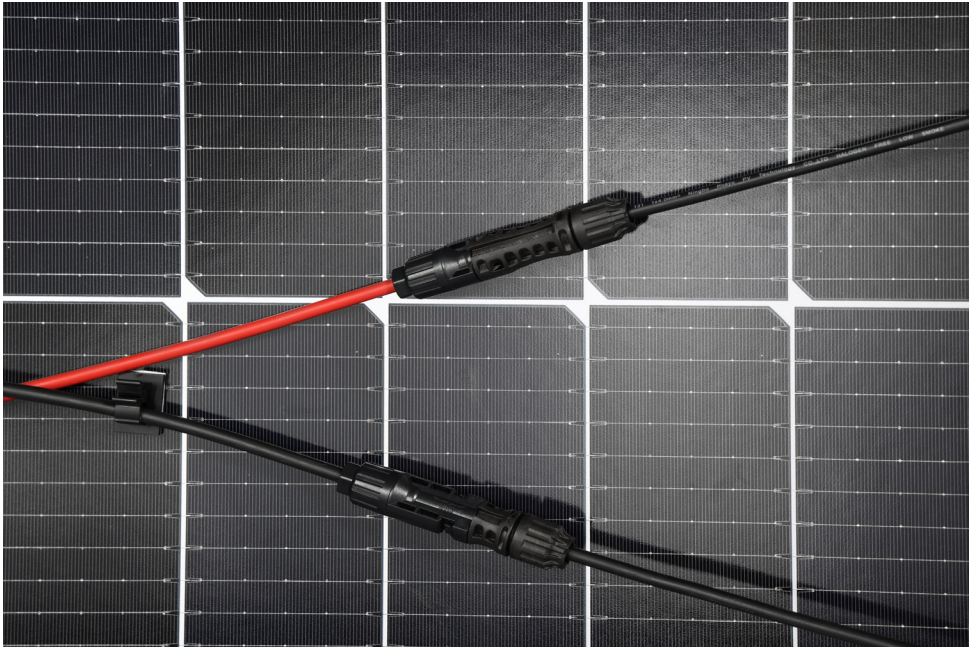
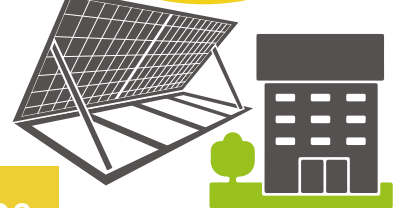
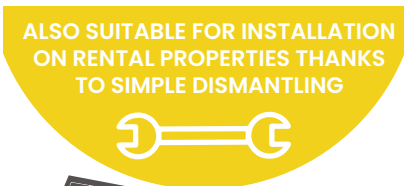
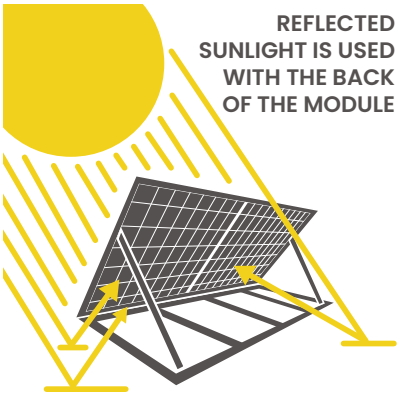
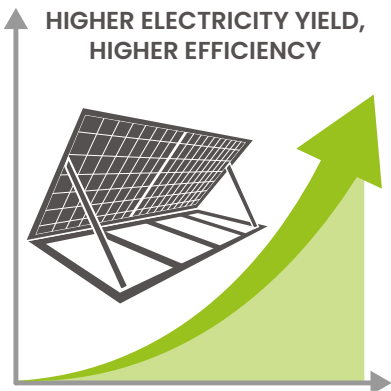
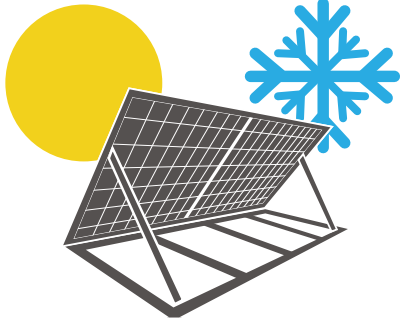


PRODUCT VIDEO

PRE-ASSEMBLED  
 MICRO INVERTER



**LESS SUSCEPTIBLE TO TEMPERATURE FLUCTUATIONS**



**MICRO INVERTER PRE-ASSEMBLED IN THE PANEL**



# EASY EXPANSION THROUGH PLUG AND PLAY



CONNECT ANY NUMBER OF MODULES IN SERIES



INTEGRATED WIFI CONNECTION



MICRO INVERTER WITH INTEGRATED WIFI

EASY WALL MOUNTING



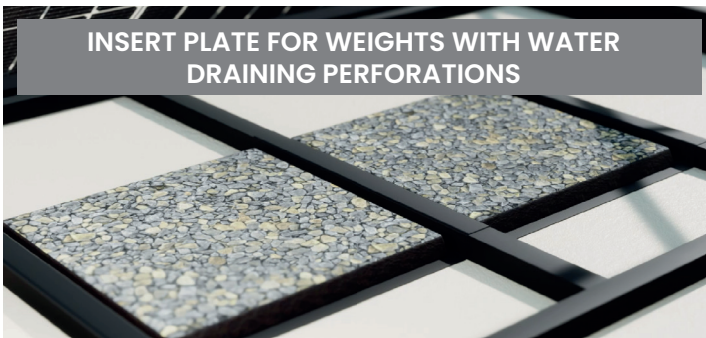
PRE-WIRED, WITH PLUG



EASY MONITORING VIA A FREE APP



INSERT PLATE FOR WEIGHTS WITH WATER DRAINING PERFORATIONS



UNPACK

OPEN

CONNECT

READY

# HEPA PRO 400 W – SELF-SUFFICIENT POWER SYSTEM



The innovative HEPA PRO complete power system is equipped with one of the industry's highest quality glass-glass HJT panels with 25.2% cell efficiency and a 30-year performance guarantee. Built in a unique fold-out frame, adjustable in angle for optimal inclination in just 2 simple steps.

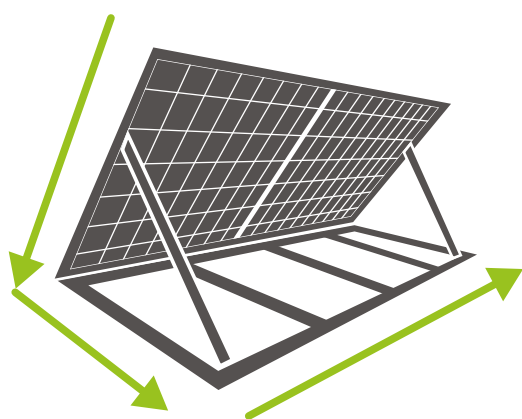
The HEPA PRO complete power system is delivered fully assembled, including a pre-installed micro-inverter and a 16ft connection cable with plug. It is packaged in a cardboard box and is set up and ready to use within a few minutes. It just needs to be plugged into the nearest outlet and, under the right weather conditions, it will deliver 400 watts directly to your home grid. That means your electric meter will run slower from that point on and your energy consumption will be reduced. Easy to place in the garden, on your garage/carport or wherever you can find space and instantly reduce your energy costs. The high-quality anodized aluminum frame can be weighted down with pavers or installed with 4 screws on the ground or against a wall. All necessary drill holes, as well as the required wall anchors are provided.

Through the smart plug & play system, you can easily expand the system module by module. A maximum of 2 modules can be connected together to a socket. For larger installations, which must be laid out in the electrical junction box, any number of modules can be connected. We recommend an equal distribution on the 3 phases. Through the already integrated WiFi technology on the micro inverter, you can monitor the power at any time with the free app on your smartphone.



## KEY DATA

- Easy wall installation
- Angle adjustable for inclination
- Incl. insertion plate for weigh down pavers
- Pre-wired with plug
- 400W micro inverter pre-assembled
- Easy expansion via plug and play
- Quality design / Full Black module with black anodized aluminum frame
- 1 HJT glass-glass module 25.2% cell efficiency
- Low cost due to easy installation
- Only partial shutdown under shade conditions



**Dimensions:**  
72 x 41 x 2.8 in

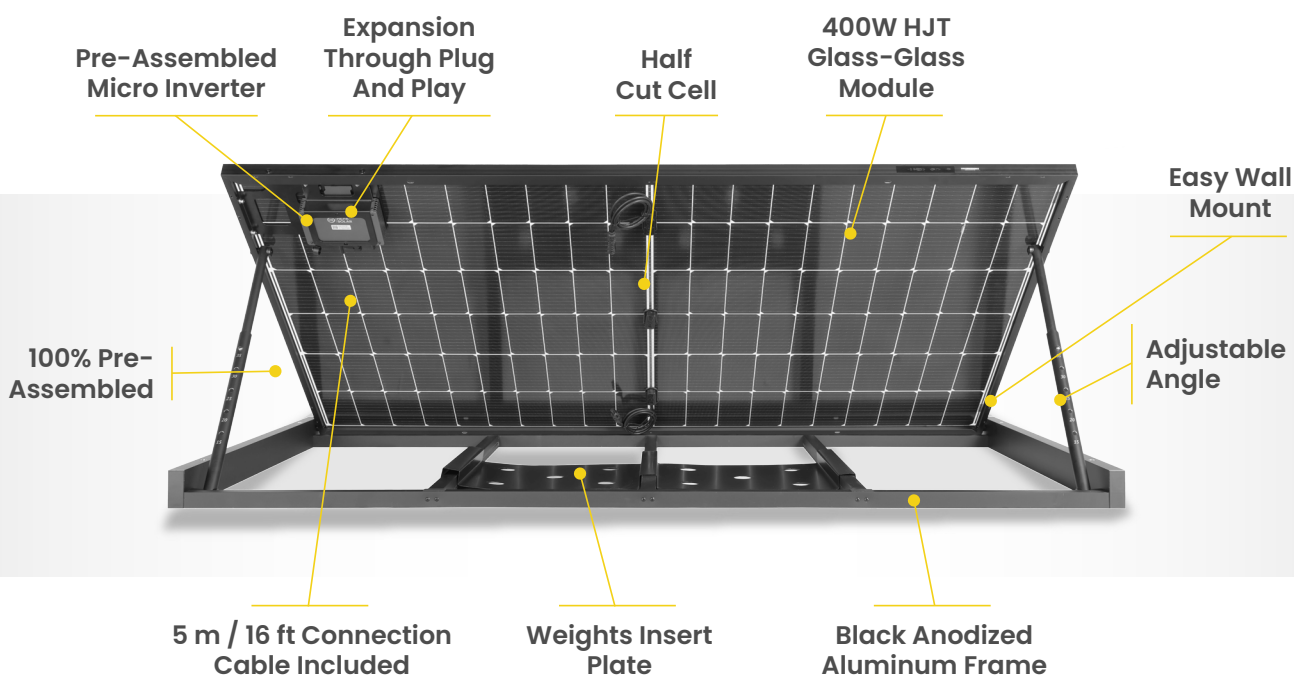
**Weight:**  
81.6 lb



**HEPA PRO 400 W**  
EAN: 4262400980221  
SKU: 22030005

## PACKAGE CONTENTS

- Complete power station
- 16ft connection cable with plug
- Anchors for wall installation
- Insert plate for weighting

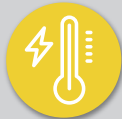


# DATASHEET HEPA 400W SOLAR MODULE



## HJT 3.0

Combination of Getter process and double-sided  $\mu\text{-Si}$  to maximize cell efficiency and module performance



## -0.26 %/°C Pmax temperature coefficient

More stable power generation rate and even better performance in hot environments.



## Small fiber design

Larger power generation area on the solar cell, increasing the cell power of a single area by 1%.



## SMBB design with half-cut technology

Shorter electricity transmission distance, less resistance loss and higher cell efficiency.



## Up to 95 % Natural symmetrical bifacial structure provides more energy output from the back side



## Sealing with PIB-based sealer

Stronger water resistance, greater air impermeability to extend module lifetime.



## Increased reliability

Industry-leading product and performance warranty, ensuring consistent outstanding module performance.



## Ideal for residential building roofs

### TEMPERATURE PROPERTIES / SPECIFICATIONS

Nominal operating temperature of the cell (NOCT)	111°F±36°F
Temperature coefficient of Pmax	-0.26%/°F
Temperature coefficient of Voc	-0.24%/°F
Temperature coefficient of Isc	0.04%/°F

### SAFETY & WARRANTY

Safety	Class II
Product warranty	15 years
Performance warranty	30 years

## ELECTRICAL SPECIFICATIONS

HS-B120	DSN400-B
Maximum power (Pmax)	400W
Module efficiency	22%
Optimum operating voltage (Vmp)	37.43V
Optimum operating current (Imp)	10.70A
Open circuit voltage (Voc)	44.87V
Short circuit current (Isc)	11.12A
Operating temperature	-40 to +85°C
Maximum system voltage	DC1500V (IEC)
Maximum serial protection	20A
Extended frequency range	0~+5W
Bifaciality	90%±5%

## BSTC

Peak power (Pmax)	445W
Optimum operating voltage (Vmp)	39.50V
Optimum operating current (Imp)	11.32A
Open circuit voltage (Voc)	47.54V
Short circuit current (Isc)	11.66A

## MECHANICAL SPECIFICATIONS

Cell type	HJT Mono 166x83 mm
Cell connection	120 (60x2)
Dimensions	1755x1038x30 mm
Weight	23.5 kg
Junction box	IP68
Output cable	4mm <sup>2</sup> , 1200mm length, length can be customized / UV resistant
Plug connector type	MC4-Original
Frame	Anodized Aluminum Alloy (Black)
Encapsulation agent	POE
Charge Frontside	5400 Pa
Charge Reverse	2400 Pa
Glass Strength / Width	(F) 2.0 mm Anti-reflective Solar Glass   (B) 2.0 mm Solar Glass

# HEPA BASIC SOLAR MODULE

---

**HEPA BASIC**  
EAN: 4262400980276  
SKU: 22030008

The HEPA SOLAR Basic Solar Module is the basis of all our complete power systems. You can purchase it separately if you want to expand your system, combine it with another microinverter or use it as an isolated solution with one of our storage units.



# ALL MODULES ALSO AVAILABLE AS A SET INCLUDING BALCONY MOUNTING HARDWARE

You can easily attach our BASIC solar module or our complete PRO and PREMIUM power modules to your balcony. You can purchase the balcony Hooks from our accessories individually or simply order one of these complete sets, in which the appropriate number of balcony hooks and clamps with the corresponding bolts are already included in the delivery box.



BASIC



**HEPA BASIC + Balcony Mounting**

EAN: 4262400980481

SKU: 22030014



PRO



**HEPA PRO 400W + Balcony Mounting**

EAN: 4262400980467

SKU: 22030012

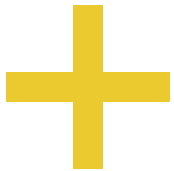
# HEPA Premium 800W + Balcony Mounting

EAN: 4262400980269

SKU: 22030007



PREMIUM



# HEPA ISOLATED SOLUTION



Would you like to be completely independent from the grid? Then use our HEPA SOLAR ISOLATED SOLUTION. Combine our HEPA BASIC SYSTEM with our BATTERY STORAGE. Install our complete power system in a few minutes and instead of feeding electricity directly into your grid, you can charge the battery storage and use it for any of your devices. 110 V / 230 V will be immediately available, enough to operate for example an electric garage door opener and lighting or as a charging station for your e-bike.



# BATTERY STORAGE 1500 W

---



## Bidirectional converter



## The battery storage is fully charged in only 1.5Hrs

Can be charged with up to 800W DC directly via 2 panels of 400W each (models from the industry's current top 3 brands with comparable power can be charged with a maximum of 600W DC).

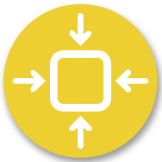


## DC output with Aviation connection operates in 2 levels

The DC output with Aviation connector is suitable for very many outdoor applications (e-outboard motor, refrigerator, air pump, lighting, etc.) It can be operated in 2 levels: either 12V and 20A/240W or 24V and 20A/480W output. None of the top 3 brands in the market have this configuration integrated.



**Our storage unit is made of lithium iron phosphate, and therefore it is very safe, durable, efficient and environmentally friendly**



## More compact and lighter

The dimensions of the HEPA storage unit are 20% smaller than storage units of the top 3 brands with the same performance.



## Fast UPS function

The integrated UPS function switches in approx.10 milliseconds. This makes the HEPA storage faster than 80% of all other manufacturers.



## High Quality LCD Display Showing All Functions at A Glance



**The design was created by a former Apple designer and received the Red Dot Award**



reddot design award



**Affordable**



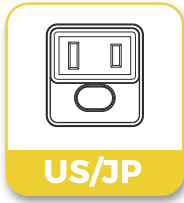
**Ideal for outdoors, Home, DIY or as a fully independent solution, combined with the HEPA PRO and HEPA BASIC SYSTEMS.**



## HEPA S 1500 W

EAN: 4262400980306

SKU: 21050002



## SPECIAL FEATURES

### SOLAR CHARGING IN 1.5Hrs

Charging up to 800W via solar panel

### CHARGING BY 230V IN 2Hrs

with 230V charging cable from 0% - 80% in 1H, from 0% - 100% in 2Hrs

### UNINTERRUPTED POWER SUPPLY (UPS)

Switches within  $\leq 10\text{ms}$ .

### 1280WH CAPACITY AND 1500W OUTPUT POWER

Supply for a large number of high-power devices and appliances.

Up to

# 3000w

peak

# 800w

Max. PV Input

# 1.5Hrs

solar charging

# UPS

$\leq 10\text{ms}$

# 97.6%

Max. Efficiency

# 600w

Max. AC Input

# 1H

80% Charge at 230V

# 5YEAR

Warranty

## OVERVIEW

Weight	32lb
Dimensions	13.7 x 9 x 10.3in
Power	1280 Wh

## OUTPUT

AC Output (x2)	100-120Vac/220-240Vac, 50Hz/60Hz 1500W (Peak 3000W) Reine Sinuskurve
USB-A Output (x2)	5V/3A, 9V/2A, 12V/1,5A
USB-C Output (x2)	5V/3A, 9V/3A, 12V/3A, 15V/3A, 20V/3A, 20V/5A
Wireless charging (x1)	5W, 7,5W, 10W, 15W
2-stage aviation connection (x1)	12V/20A, 24V/25A

## INPUT (CHARGING OF THE BATTERY)

230V AC via connection cable	Max. 600W
AC charging voltage	100-120Vac/220-240Vac, 50Hz/60Hz
Solar Charging	PV 12-60V 800W Max MPPT
Car Charging	DC 12V~60V 600W Max

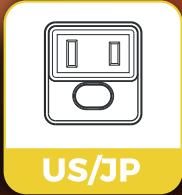
## DETAILS

Battery type	LFP (LiFePO4) Lithium -Eisenphosphat
Operating temperature	-14~104 °F
Charging / loading temperature	0~104 °F
Charging time	1 year (when fully charged)
Cycles	over 1000 Charging Cycles

## CERTIFICATION

UN 38.3 / FCC / MSDS / CE / ROHS / Class III / ETL(US) / IEC 62619(EU) / UL 1973(US) / UKCA

# HEPA STORAGE / BATTERY 650 W



**Lithium iron phosphate battery**  
Safe, durable, powerful and environmentally friendly



15W wireless charging for cell phone, tablet etc.



Appealing, compact design, high-quality finish



Sturdy construction, with internal reinforcement bracket for added safety



LED reading light (On Handle)



High Quality LCD Display Showing All Functions At A Glance



Affordable



## DESCRIPTION

Weight	15 lb
Dimensions	10 x 10 x 6.1 in
Power capacity	608Wh

**HEPA S 650 W**  
EAN: 4262400980290  
SKU: 21050001

## DETAILS

Battery type	LFP (LiFePO4) Lithium – Eisenphosphat
Charging cycles	≥3000
Operating temperature	14°F to 140°F
Charging temperature	0°F to 113°F
Protective Functions	over charge/over discharge/over current/over temp/ short circuit/over voltage
Dimensions Packaging	14 x 12 x 9.6 in

## OUTPUT

AC output (x2)	110V/220V/50Hz/60Hz/ Konstant: 650W / Peak:1200W
AC nominal power range	547Wh
DC output	12V – 10A
USB ports	5V-2A/QC3.0-18W
USB Support Protocol	FCP/QC3.0/QC2.0/Apple mode/AFC/BC1.2
Wireless charging	Max15W
Wireless Charging Protocol	WPC1.2.4 EPP

## INPUT (BATTERY CHARGING)

Via USB-C port on the front of the device	with standard cell phone or tablet charger, preferably with PD charger for fast charging
TYPE-C	5V/9V/12V/15V/20V/3A/5A
TYPE-C Support Protocol	PD2.0/PD3.0/QC2.0/QC3.0/QC3+/FCP/AFC/SCP/Apple
Per Charger / AC Adapter with 20V-3.5A	Max 5A/100W Adapter
Per PV panel	connection directly to the DC cables of the PV panel with the adapter cable, 60V-10A (Max200W)

## CERTIFICATIONS

PSE/IEC62133 Report/METI filing/UN38.3/MSDS/ROHS/CE/EMC/LVD/FCC/ Sea and air freight certificate/Drop Test Report

## ACCESSORIES

Car Charger Cable/AC Adapter/AC Charger Cable/PV Adapter Cable/Product Manual/Certificate/Warranty Card

## BALCONY MOUNTING

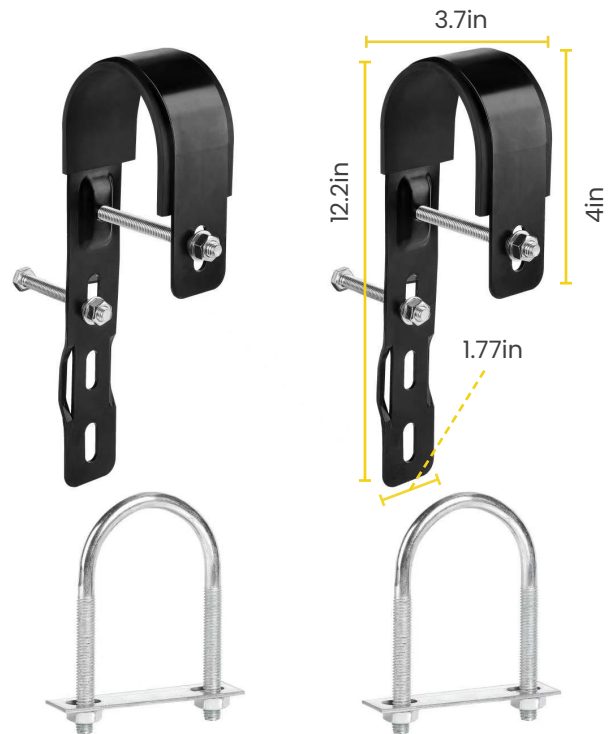
The Hepa set for mounting from railings consists of 2 extra strong steel hooks and 2 C-clamps with the corresponding bolts.

With this attachment, all HEPA complete power systems can be installed on a variety of railings.

### HEPA PRO Railing Set

EAN: 4262400980283

SKU: 22030009



## CONNECTING CABLE

### Cable to connect from 400W micro inverter

- Connecting cable 400W
- Cable to inverter 3 x 0.75mm<sup>2</sup>
- End-to-end cable 3 x 4mm<sup>2</sup>



### Connecting cable 400W

EAN: 4262400980375

SKU: 21040004

### Cable to connect from 800W micro inverter

- connection cable 800W
- cable 3 x 4mm<sup>2</sup>



### Connecting cable 800W

EAN: 4262400980382

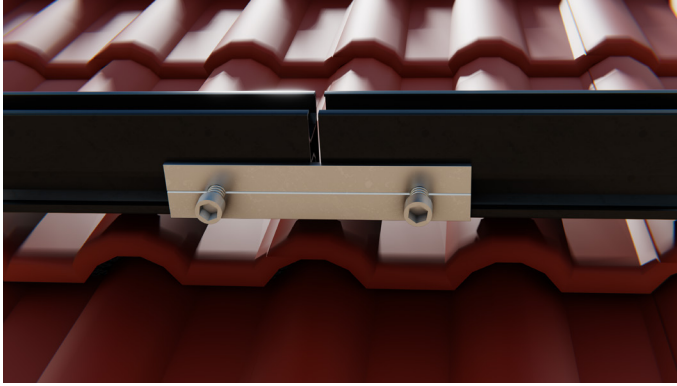
SKU: 21040005

### Roof bracket tile roof

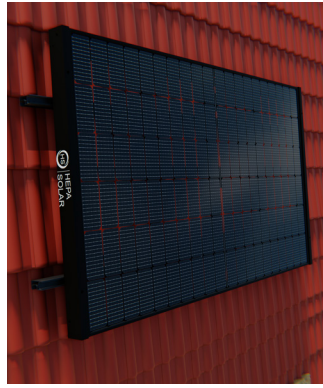
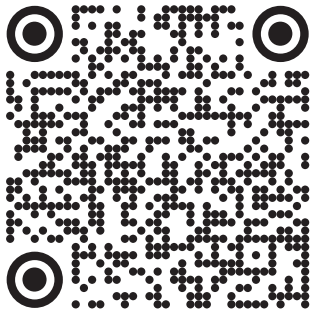
EAN: 4262400980436

SKU: 22030010

## ROOF BRACKET TILE ROOF



PRODUCT VIDEO ▶

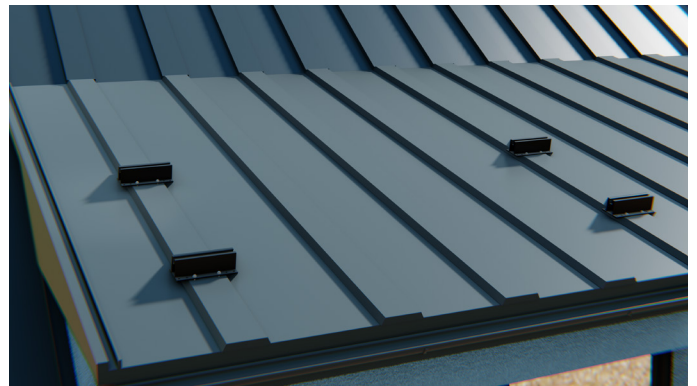
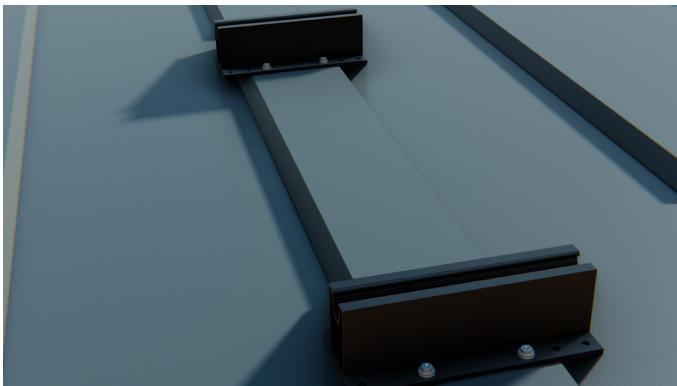


### Roof bracket trapezoid sheet

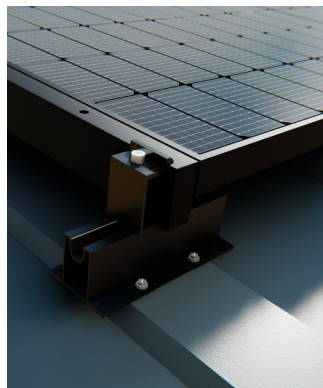
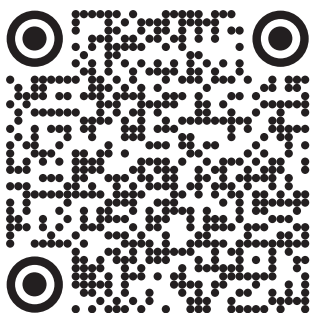
EAN: 4262400980443

SKU: 22030011

## ROOF BRACKET TRAPEZOID SHEET



PRODUCT VIDEO ▶



# HEPA MICRO INVERTER – 400 W

**HEPA M 400W**

EAN: 4262400980313

SKU: 21040001

## DC INPUT

Model	WVC-300	WVC-350	WVC-400
Total module power (V)	Max 375W	Max 435W	Max500W
Peak power MPPT voltage range (V)	30-60		
Min./max. Starting voltage (V)	22		
Operating range (V)	22-60		
Maximum input DC voltage (V)	60		
Max. continuous input DC current (A)	13.7	16	18
Max. input DC short-circuit current (A)	15	18	20
DC port back-feed current (A)	0		



## AC OUTPUT

Model	WVC-300	WVC-350	WVC-400
Rated output current (A)	120V 2.5A 230V 1.3A	120V 2.9A 230V 1.5A	120V 3.3A 230V 1.7A
Nominal output voltage range (V)	120V 85-160VAC   230V 180-265VAC		
Extended frequency range (Hz)	120V 48-51Hz/58-61Hz   230V 48-51Hz/58-61Hz		
Grid-tied power factor	>0.99 default   0.8 leading...0.8 lagging		
Total harmonic distortion	<3%		
Maximum unit per station	120V 15PCs 230V 25PCs	120V 15PCs 230V 25PCs	120V 15PCs 230V 25PCs

## PACKAGE

WVC-300/ WVC-350	Single (packaging)	FCL (15 units)
Gross weight	2lb 5.03oz	35lb 11.4oz
Size	9.6 x 8 x 2.3 in	17.7 x 15.5 x 13.5 in

## EFFICIENCY, SAFETY AND SECURITY

Highest micro inverter efficiency	92.70%
CEC weighted efficiency	92.50%
Nominal MPPT efficiency	99.80%
Nighttime power consumption (mW)	<50

## SPECIAL FEATURES

Power-Delivery-Mode	Reverse transmission, load priority
Communication mode	WiFi
Monitoring system	Cloud Intelligence
Warranty	5 years
Electrical Standard	Cloud Intelligence

## MECHANICAL DATA

External operating temperature range (°F)	-4 to +122
Storage temperature range (°F)	-4 to +122
Dimensions (length x width x height in)	6.5 x 7 x 1.5
Weight (lb)	2.89oz
Waterproof level	Outdoor Nema 3r (ip65)
Cooling method	Natural Convection (no Fans)
Pollution degree	PD3

EN 50549-1:2019, EN 50549-2:2019 | EN 61000-6-1:2007, EN 61000-6-3:2007 + A1:2011 + AC2012 IEC/EN 62109-1:2010, IEC/EN 62109-2:2011, VDE-AR-N 4105:2018-11



# HEPA MICRO INVERTER – 800 W

## DC-INPUT

Model	WVC-600	WVC-700	WVC-800
Maximum input power	Max 2x375W	Max 2x435W	Max 2x500W
MPPT voltage range (module open circuit voltage)	30-60V		
Start voltage	22V d.c.		
Operating voltage range	22-60V d.c.		
Open Circuit Voltage	60V		
Input circuit current	2x14A	2x16A	2x18A
Maximum input short-circuit current	2x16A	2x18A	2x20A
Maximum feedback current of the array	0A		

## MECHANICAL DATA

External Operating temperature range (°F)	-4 to +122
Storage temperature range (°F)	-4 to +122
Dimensions (length x width x height in)	11.2 x 8 x 1.6in
Weight (lb)	3lb 3.5oz
Waterproof level	Outdoor Nema 3r (ip65)
Cooling method	Natural Convection (no Fans)
Pollution degree	PD3

## EFFICIENCY, SAFETY AND SECURITY

Highest micro inverter efficiency	92.70%
CEC-weighted efficiency	92.50%
Nominal MPPT efficiency	99.80%
Nighttime power consumption (mW)	0

## PACKAGE

Specification	Single (packaging)	FCL (5 units)
Standard 9ft 10in AC grid-connected cable	5lb 1oz 13.5 x 9.5 x 4in	27lb 1.8oz 17.7 x 15.7 x 10in
Standard 16ft 4.8in AC grid-connected cable	5lb 11.7oz 13.5 x 9.5 x 4in	30lb 6.7oz 17.7 x 15.7 x 10in

**HEPA M 800W**  
 EAN: 4262400980337  
 SKU: 21040003



EN 50549-1:2019, EN 50549-2:2019 | EN 61000-6-1:2007, EN 61000-6-3:2007 + A1:2011 + AC2012 IEC | EN 62109-1:2010, IEC/EN 62109-2:2011 VDE-AR-N 4105:2018-II

## AC OUTPUT

Model	WVC-600	WVC-700	WVC-800
Maximum peak	600VA	700VA	800VA
Rated output current	120V 5A 230V 2.6A	120V 5.9A 230V 3.1A	120V 6.6A 230V 3.5A
Nominal output voltage range	120V AC (application area: like Japan, North America) 230V a.c. (application area: like Europe)		
Nominal frequency range	50Hz/60Hz		
Power coefficient	>0.99 default   0.95 leading...0.95 lagging		
Output current harmonic distortion	<3%		
Maximum units per outlet	120V 6PCs   230V 12PCs		

## SPECIAL FEATURE

Power-Delivery-Mode	Reverse transmission, load priority
Communication method	WiFi
Monitoring system	Cloud Intelligence
Warranty	5 years
Electrical Standard	Cloud Intelligence

# SYSTEM EXAMPLES / OPTIONS

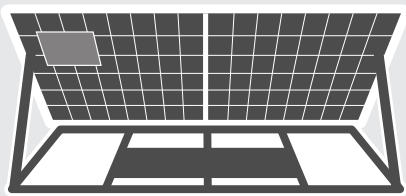
We would like to give you a brief insight into the different ways in which the HEPA module can be used.

## HEPA PRO 400 WATT SYSTEM

Consisting of 1x 400W unit that can be plugged directly into a wall socket. If you buy 2 HEPA PRO 400W units to obtain an 800W unit, you can also place the units in different locations on your property.

### To Buy:

1x HEPA PRO 400W module

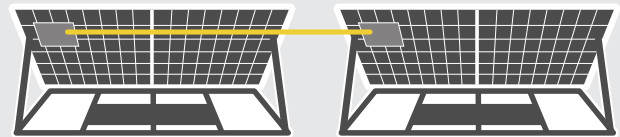


## HEPA PREMIUM 800 WATT SYSTEM

Consisting of 1x HEPA PREMIUM 800W unit that can be plugged directly into a wall socket. The system consists of 2 modules, one module has an 800W microinverter installed. The second module can be easily plugged into the first microinverter.

### To Buy:

1x HEPA PREMIUM 800W Module



## HEPA 1200 WATT SYSTEM

**Option 1:** 1x HEPA PREMIUM 800W and 1x HEPA PRO 400W  
or **Option 2:** 3x HEPA PRO

### To Buy:

**Option 1:** 1x HEPA PREMIUM 800W + 1x HEPA PRO 400W + 1x connecting cable 400W



### To Buy:

**Option 2:** 3x HEPA PRO 400W + 3x connecting cable 400W



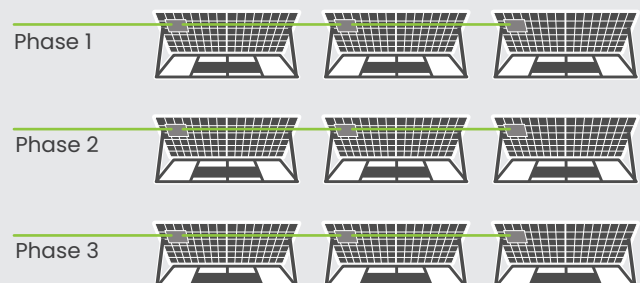
## HEPA 3.6 KW SYSTEM

Consisting of 9x HEPA PRO 400W modules. We recommend distributing the modules across the 3 phases.

### To Buy:

9x HEPA PRO 400W Modul  
+ 9x connecting cable 400W

**IMPORTANT:** The system must be installed and registered by an authorized electrician. This equipment must not be operated from the wall socket.



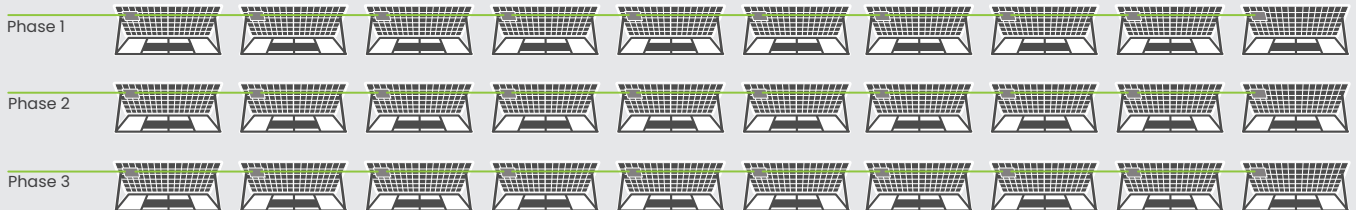
## HEPA 12 KW SYSTEM

Consisting of 30x HEPA PRO 400W modules. We recommend distributing the modules across the 3 phases.

**To Buy:** 30x HEPA PRO 400W Modul + 30x connecting cable 400W

**IMPORTANT:** The system must be installed and registered by an authorized electrician.

This equipment must not be operated from the wall socket.



The microinverters can be connected in series on all phases.

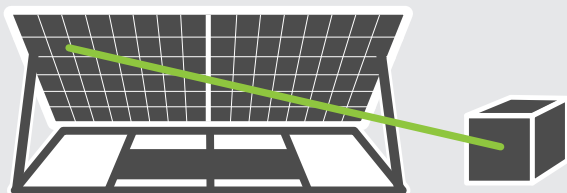
### HEPA ISOLATED SOLUTION – OPTION 1

Consisting of a HEPA BASIC and a 650W storage battery. The HEPA BASIC consists of a PV module and our high-quality aluminum frame. No microinverter is installed on the module, as it is already integrated in the storage device. With this option you are completely self-sufficient and do not need a grid connection.

**To Buy:**

1x HEPA BASIC +

1x HEPA 650W Storage battery



### HEPA ISOLATED SOLUTION – OPTION 2

Consisting of two HEPA BASIC and a 1500W storage unit. The HEPA BASIC consists of a PV module and our high-quality aluminum frame. No micro inverter is installed on the module, as it is already integrated in the storage device. With this option you are completely self-sufficient and do not need a power supply. You can charge the 1500W storage with 800W.

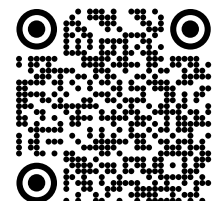
**To Buy:**

2x HEPA BASIC +

1x HEPA 1500W Storage battery



This is only a brief insight into a few options of how to use the HEPA module. There are of course many other possibilities. If you have any questions, please do not hesitate to contact the HEPA TEAM.



# THE INDUSTRY'S BEST SYSTEM

---

The HEPA Solar Self-Sufficient Power System is not only unique, but also the world's highest quality and most efficient solar power system in the entire mini-PV market. It is the only system that is REALLY delivered completely assembled in a box. The HEPA Solar Complete Power System will provide you with energy in just a few minutes, while all other conventional kits require significant assembling effort.

Due to the highest efficiency in the entire PV sector (+ 30-year performance guarantee even under cloudy conditions), the HEPA system pays for itself faster than 95% of conventional systems.

**To put it metaphorically:** You can compare it to 2 cars racing and having different engines: The HEPA system has demonstrably the highest „horsepower“ in the race and not only drives permanently faster, but will still drive full speed after 30 years, while the conventional one will quickly lose performance after 20 years and will drive slower and slower.

## THE BEST PANEL IN THE INDUSTRY

With our HJT glass-glass panel, we achieve the highest efficiency available in the entire PV market. Although there are other glass-glass panels (without HJT technology), they do not achieve the same efficiency. Due to the unique HJT Glass-Glass technology, peak performance is reached much more often and consistently, producing the highest amount of energy on an annual average. The HEPA self-sufficient power system will deliver even in cloudy or high temperatures situations, where all other systems will drop sharply or even shut down. Our panels are the panels of the future, producing the highest output in the smallest area. Its high quality is proven by several TÜV certificates for fire safety, hailstorm up to 1,4in, breakage resistance, corrosion, etc.

## THE HEPA SOLAR FRAME: THE MOST DURABLE CONSTRUCTION IN THE ENTIRE MARKET

**No perforated sheet, no sawed-off profiles, no bending in the wind, no rattling!**

Our patented frame, with super quick installation and individual angle adjustment, is made of high-strength 6061 aluminum square tubing for maximum strength and durability. It is custom made, anodized and laser cut in our own manufacturing facility using our precision technology. This design is patented, so there is only one HEPA Solar Original.

## THE MICROINVERTER

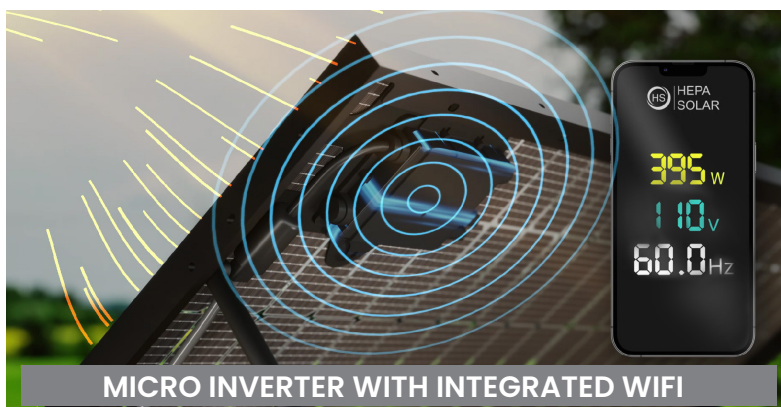
Our HEPA solar microinverter is equipped with the highest quality electronic components, which is another big differentiator from our competitors. The shell is cast from the inside, making it completely waterproof (IP67). The microinverters feature Wi-Fi and Bluetooth, and the output power can be adjusted through our user-friendly app.

## CONCLUSION

Based on all the facts listed, we can proudly say: Yes, we have the highest quality self-sufficient power system available in the entire market.

## EASY MONITORING VIA FREE APP

Due to the already existing Wi-Fi feature on the micro inverter, you can read out and display the power at any time with the free app on your smartphone.



### FREE DOWNLOAD APP



# WHY IS HEPA SOLAR IS COMMITTED TO HJT TECHNOLOGY?

---

Heterojunction technology (HJT) has long been overlooked. But in recent years it has gained momentum and shown its true potential. HJT technology solves multiple common challenges that conventional PV modules have.

Heterojunction solar cells (HJT) are a combination of crystalline solar cells and thin-film cells. The thin monocrystalline silicon wafer has an extremely thin coating of amorphous silicon on both the front and back sides. The advantage is that this allows a broader spectrum of sunlight to be used. HJT solar cells therefore have high efficiencies of up to 25% or more.

In a normal solar cell, the n and p dopants are located within a single silicon layer. This causes a very irregular interfacial structure of the different dopants. In a heterojunction solar cell, the interface structure is homogeneous, with only minimal irregularities, since the complete layer has one and the same doping.

	<b>Heterojunction</b>	<b>Monocrystalline</b>	<b>Polycrystalline</b>
Material	Mono c-Si, a-Si:H	Mono c-Si	Poly c-Si
Shelf life / durability	30 Years	25-30 Years	25-30 Years
Temperature coefficient	-0.21%/°F	-0.446%/°F	-0.387%/°F
Efficiency rate	26.70%	25.40%	24.40%
Market percentage	2-5%	36.00%	54.90%
Price	More expensive	Moderate	Cheaper

The advantage of HJT solar cells over normal solar cells is that only a few electrons are lost to the pinholes due to the homogeneous surface structure of the positive layer. The loss of current in the transition from the solar cell to the electrical consumer is therefore lower.

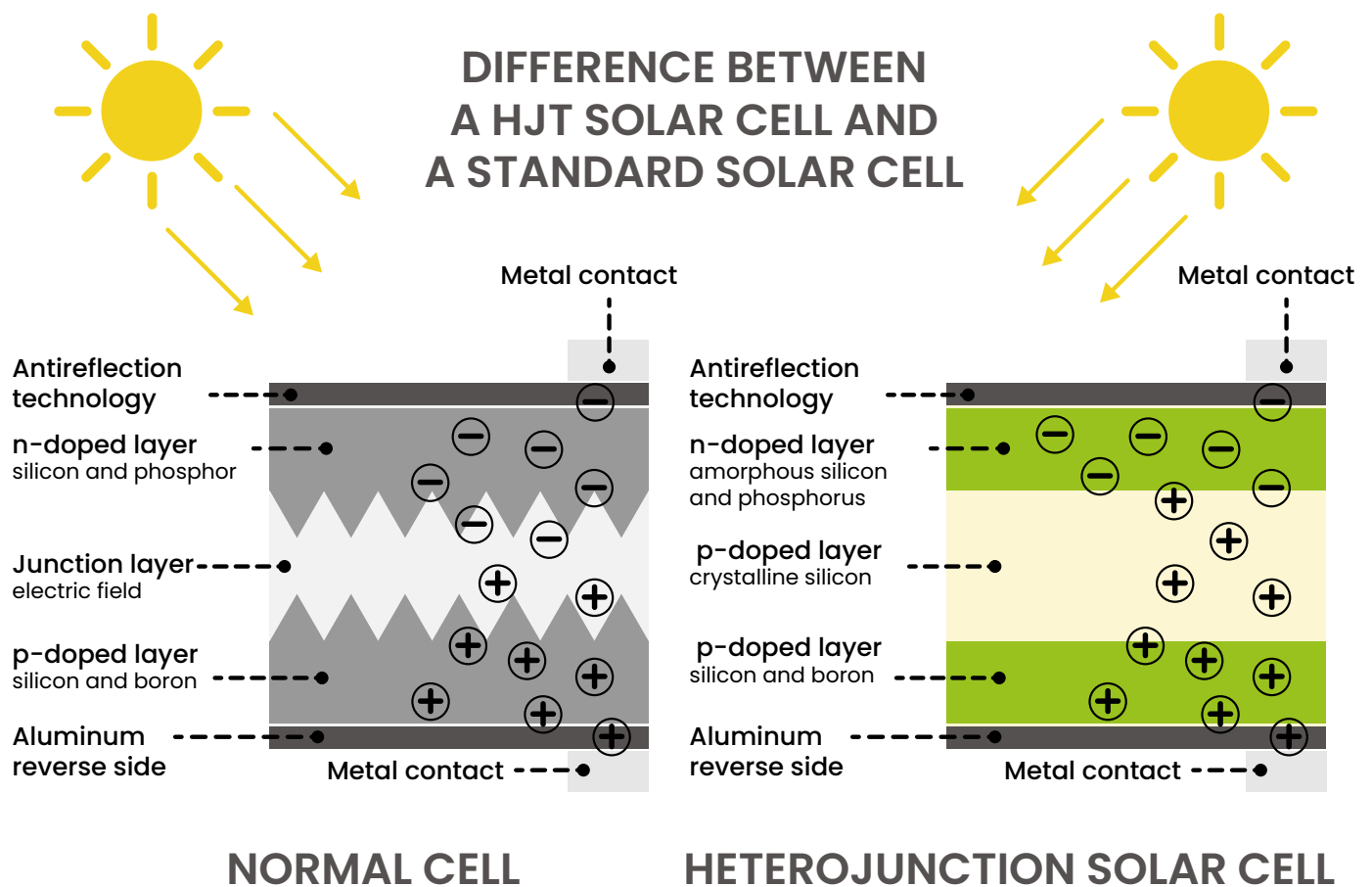
## HIGH EFFICIENCY

---

With an efficiency of 26.0% for monofacial modules and more than 30% for bifacial modules, heterojunction is one of the most efficient solar technologies on the market. This makes it very useful for reduced spaces.

## ADVANTAGES OF HJT SOLAR MODULES:

- Both direct and indirect sunlight is used
- Higher power yield
- Better surface passivation
- Higher current voltage and open circuit voltage
- Lower electron loss in the junction
- Better temperature coefficient
- Higher efficiency and effectiveness
- Reflected sunlight can be used with the backside of the module
- No light induced degradation
- Lower manufacturing costs than other technologies



Both HJT and bifacial („double-sided“) solar cells can also use light via the reverse side of the cell. In HJT modules, the bottom amorphous layer provides light collection via the back side. In bifacial modules, it is a second glass sheet that allows indirect light from reflected sunlight to return to the cell from behind. As a result, both types of solar modules achieve a higher degree of efficiency.

Heterojunction solar cells are not new to the photovoltaic market. Nevertheless, their market share of only 2 to 5 % is small. Yet HJT technology has many advantages. The high efficiency of over 25 % should be emphasized. There are very few highly specialized factories in the world that can produce HJT technology and HEPA SOLAR is the only supplier in the market that has access to these unique panels.



**HEPA**  
**SOLAR**

**HEPA Solar GmbH & Co. KG**

Feuerweg 6b

D-27639 Wurster Nordseeküste

Tel.: +49 (0) 4741 60 38 48 - 0

office@hepa-solar.de

**www.hepa-solar.com**

 hepasolar

 hepa.solar