

# MOTOMA<sup>®</sup>

Power into the Future

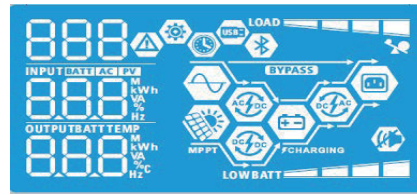
# INVERTER CATALOGUE

Quality Creates Brand, Service Enchances Value



[www.motoma.cn](http://www.motoma.cn)

# OFF- GRID INVERTER Axpert VM III TWIN



LCD Display Panel



• **Dual outputs for smart load management**

There are two outputs available. The second output can be scheduled on/off, setting cut-off voltage or SOC and discharging time via LCD setting. It facilitates users smart load control.

• **Maximum PV input current 27A**

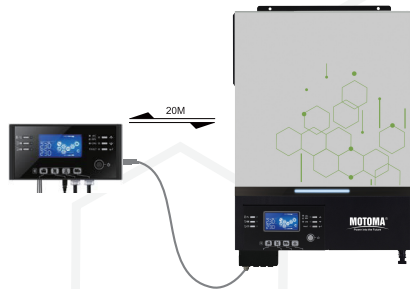
Designed with 27A PV input current, Axpert VM III TWIN is compatible to the market trend of increased Imp in solar panel.

• **Wide PV input voltage range 60VDC~450VDC**

Now, Axpert VM III TWIN allows wide PV input voltage range from 60VDC to 450VDC. This features allow less solar panel required in the system and save space.

• **Detachable LCD control module with various communications**

This detachable LCD control module can be turned to remote panel. Users can install the LCD panel in accessible area away from inverter up to 20 meters.



• **Built-in WiFi for mobile monitoring (App is available)**

VM III TWIN series is integrated Wifi interface ready for mobile monitoring. This technology allows wireless communication up to 6~7m in an open space. Now, WatchPower App is available in google store.



• **Customizable status LED Line with RGB lights**



• **Reserved communication port (RS-485, CAN-BUS or RS-232) for BMS**

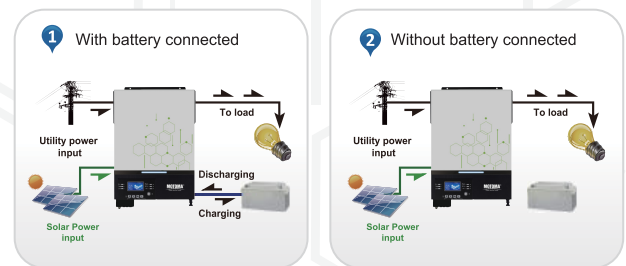
This third generation inverter is reserved communication port for BMS. For the detailed information, please contact sales directly.

• **Battery equalization extends lifecycle**

This inverter charger is built in battery equalization function. This function will help remove sulfation to optimize battery performance and even extend lifecycle.

• **Battery independency**

Inverter can keep supplying power to the loads from PV energy or the grid without battery connected.



• **User-friendly LCD operation**

Users can easily set up or change the charging current, output source and charger source prioritization through LCD control panel to optimize inverter performance.



• **Replaceable fan design**

VM III TWIN series is designed with replaceable fan. It will simplify the maintenance and reduce the maintenance cost.



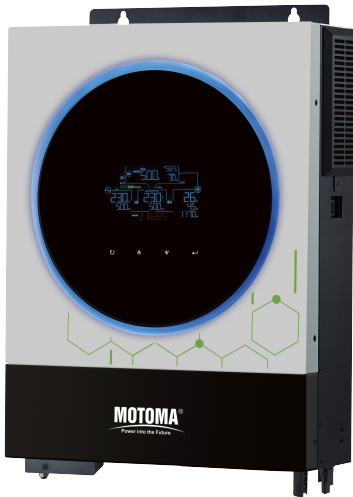
**Axpert VM III TWIN Off-Grid Inverter Selection Guide**

| MODEL                                 | Axpert VM III TWIN 4K  | Axpert VM III TWIN 6K |
|---------------------------------------|--|-----------------------|
| Rated Power                           | 4000VA/4000W   | 6000VA/6000W          |
| <b>INPUT</b>                          |  |                       |
| Voltage                               | 230 VAC  |                       |
| Selectable Voltage Range              | 170-280 VAC (For Personal Computers)<br>90-280 VAC (For Home Appliances) |                       |
| Frequency Range                       | 50 Hz/60 Hz (Auto sensing)   |                       |
| <b>OUTPUT</b>                         |  |                       |
| AC Voltage Regulation (Batt. Mode)    | 230VAC ± 10%   |                       |
| Surge Power                           | 8000VA   | 12000VA               |
| Efficiency (Peak)                     | 90% ~ 93%  |                       |
| Transfer Time                         | 15 ms (For Personal Computers)<br>20 ms (For Home Appliances)            |                       |
| Waveform                              | Pure sine wave   |                       |
| <b>BATTERY</b>                        |  |                       |
| Battery Voltage                       | 24 VDC   | 48 VDC                |
| Floating Charge Voltage               | 27 VDC   | 54 VDC                |
| Overcharge Protection                 | 33 VDC   | 63 VDC                |
| <b>SOLAR CHARGER &amp; AC CHARGER</b> |  |                       |
| Solar Charger type                    | MPPT   |                       |
| Maximum PV Array Power                | 5000W  | 6000W                 |
| MPP Range @ Operating Voltage         | 60 ~ 450 VDC   | 60 ~ 450 VDC          |
| Maximum PV Array Open Circuit Voltage | 500 VDC  | 500 VDC               |
| Maximum PV Input Current              | 27A  |                       |
| Maximum Solar Charge Current          | 120A   | 120A                  |
| Maximum AC Charge Current             | 100A   | 100A                  |
| Maximum Charge Current                | 120A   | 120A                  |
| <b>PHYSICAL</b>                       |  |                       |
| Dimension, D x W x H (mm)             | 115 x 300 x 435  |                       |
| Net Weight (kgs)                      | 9  | 10                    |
| Communication Interface               | USB, RS232, RS485, WiFi, Dry-contact                                     |                       |
| <b>OPERATING ENVIRONMENT</b>          |  |                       |
| Humidity                              | 5% to 95% Relative Humidity (Non-condensing)                             |                       |
| Operating Temperature                 | -10°C to 50°C  |                       |
| <b>Storage Temperature</b>            | -15°C to 60°C  |                       |

Product specifications are subject to change without further notice.

# OFF- GRID INVERTER

## Axpert VM IV TWIN



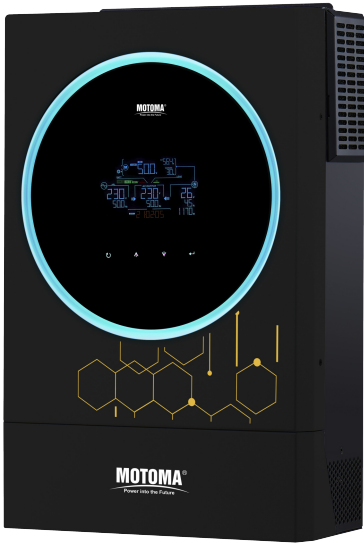
- Dual output for smart load management
- Wide PV input voltage range 60VDC~450VDC
- Customizable status LED ring with RGB lights
- Touchable button with large 4.3" colored LCD
- Reserved communication port (RS485, CAN-BUS or RS232) for BMS
- Built-in Wifi for mobile monitoring (Android/iOS App available)
- Supports USB On-the-Go function
- Data log event stored in the inverter
- Maximum PV input current 27A
- Battery independent design
- Battery equalization extends lifecycle
- Enhanced charging power
- Built-in anti-dust kit



### Axpert VM IV TWIN Off-Grid Inverter Selection Guide

| MODEL                                 | Axpert VM IV TWIN 4K   | Axpert VM IV TWIN 6K |
|---------------------------------------|--|----------------------|
| Rated Power                           | 4000VA/4000W   | 6000VA/6000W         |
| <b>INPUT</b>                          |  |                      |
| Voltage                               | 230 VAC  |                      |
| Selectable Voltage Range              | 170-280 VAC (For Personal Computers)<br>90-280 VAC (For Home Appliances) |                      |
| Frequency Range                       | 50 Hz/60 Hz (Auto sensing)   |                      |
| <b>OUTPUT</b>                         |  |                      |
| AC Voltage Regulation (Batt. Mode)    | 230VAC ± 10%   |                      |
| Surge Power                           | 8000VA   | 12000VA              |
| Efficiency (Peak)                     | 90% ~ 93%  |                      |
| Transfer Time                         | 15 ms (For Personal Computers)<br>20 ms (For Home Appliances)            |                      |
| Waveform                              | Pure sine wave   |                      |
| <b>BATTERY</b>                        |  |                      |
| Battery Voltage                       | 24 VDC   | 48 VDC               |
| Floating Charge Voltage               | 27 VDC   | 54 VDC               |
| Overcharge Protection                 | 33 VDC   | 63 VDC               |
| <b>SOLAR CHARGER &amp; AC CHARGER</b> |  |                      |
| Solar Charger type                    | MPPT   |                      |
| Maximum PV Array Power                | 5000W  | 6000W                |
| MPP Range @ Operating Voltage         | 60 ~ 450 VDC   | 60 ~ 450 VDC         |
| Maximum PV Array Open Circuit Voltage | 500 VDC  | 500 VDC              |
| Maximum PV Input Current              | 27A  |                      |
| Maximum Solar Charge Current          | 120A   | 120A                 |
| Maximum AC Charge Current             | 100A   | 100A                 |
| Maximum Charge Current                | 120A   | 120A                 |
| <b>PHYSICAL</b>                       |  |                      |
| Dimension, D x W x H (mm)             | 119 x 313.6 x 457.5  |                      |
| Net Weight (kgs)                      | 10   | 12                   |
| Communication Interface               | USB, RS232, RS485, WiFi, Dry-contact                                     |                      |
| <b>OPERATING ENVIRONMENT</b>          |  |                      |
| Humidity                              | 5% to 95% Relative Humidity (Non-condensing)                             |                      |
| Operating Temperature                 | -10°C to 50°C  |                      |
| Storage Temperature                   | -15°C to 60°C  |                      |

Product specifications are subject to change without further notice.



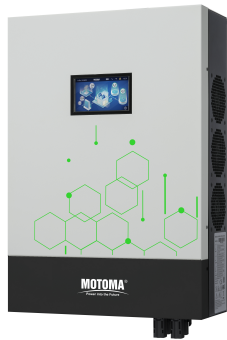
- Dual outputs, for smart load management
- Maximum PV input current increases to 27A
- Zero (0ms) transfer time to protect mission-critical loads such as servers and ATMs
- Customizable status LED ring with RGB lights
- Touchable button with 4.3" colored LCD
- Built-in Wi-Fi for mobile monitoring (App is available)
- Configurable AC/Solar input priority via LCD setting
- Reserved communication port for BMS (RS485 or CAN-BUS)
- High PV input voltage range
- Selectable high power charging current
- USB On-the-Go function
- Parallel operation up to 9 units



## Axpert King IV TWIN Off-Grid Inverter Selection Guide

| MODEL                                   |          | Axpert King IV TWIN 6K                               |
|---|----------|--|
| Rated Power                             |          | 6000VA/6000W   |
| Parallel Capability                     |          | Up to 9 units  |
| <b>GRID INPUT</b>                       |          |  |
| Voltage                                 |          | 230 VAC  |
| Voltage Range                           |          | 110-280 VAC  |
| Frequency Range                         |          | 50 Hz/60 Hz (Auto sensing) ± 4Hz                     |
| Power Factor                            |          | ≧ 0.98 @ Nominal Voltage (100% Load)                 |
| THDi                                    |          | ≦ 10%  |
| <b>OUTPUT</b>                           |          |  |
| AC Voltage Regulation (Line&Batt. Mode) |          | 230VAC ± 5%  |
| Frequency Range (Synchronized Range)    |          | 46~54 Hz or 56~64 Hz                                 |
| Frequency Range (Batt. Mode)            |          | 50 Hz ± 0.1 Hz or 60Hz ± 0.1 Hz                      |
| Harmonic Distortion                     |          | ≦ 3 % THD (Linear Load); ≦ 5 % THD (Non-linear Load) |
| Transfer Time                           | Transfer | 0 ms   |
|   | Time     | 4 ms (Typical)                                       |
| Waveform                                |          | Pure sine wave                                       |
| <b>EFFICIENCY</b>                       |          |  |
| Line Mode                               |          | 94%  |
| ECO Mode                                |          | 98%  |
| Battery Mode                            |          | 92%  |
| <b>BATTERY</b>                          |          |  |
| Battery Voltage                         |          | 40~66 VDC  |
| Floating Charge Voltage                 |          | 54 VDC   |
| Overcharge Protection                   |          | 66 VDC   |
| <b>SOLAR INPUT</b>                      |          |  |
| Solar Charger type                      |          | MPPT   |
| Maximum PV Array Power                  |          | 6000 W   |
| MPPT Range @ Operating Voltage          |          | 120 ~ 430 VDC  |
| Maximum PV Array Open Circuit Voltage   |          | 500 VDC  |
| Maximum Solar Charge Current            |          | 120A   |
| Maximum AC Charge Current               |          | 120A   |
| <b>PHYSICAL</b>                         |          |  |
| Dimension, D x W x H (mm)               |          | 140 x 295 x 468                                      |
| Net Weight (kgs)                        |          | 12   |
| Communication Interface                 |          | RS232, USB, Dry contact, WI-FI, RS485                |
| <b>ENVIRONMENT</b>                      |          |  |
| Humidity                                |          | 5% to 95% Relative Humidity(Non-condensing)          |
| Operating Temperature                   |          | -10°C to 50°C  |
| Storage Temperature                     |          | -15°C to 60°C  |

Product specifications are subject to change without further notice.



- Increased PV power to 6000W/9000W/12000W based on models
- Built-in 2 MPP trackers
- Dual outputs for smart load management
- 4.3" colored touch screen with user-friendly HMI operation
- Programmable supply priority for PV, Battery or Grid
- User-adjustable charging current and voltage
- Programmable multiple operation modes: Grid-tie, off-grid and grid-tie with backup
- Built-in WiFi with APP for mobile monitoring
- Reserved communication port for BMS
- Parallel operation up to 9 units

## InfiniSolar V5 Pro TWIN Hybrid Inverter Selection Guide

| MODEL  | InfiniSolar V5 Pro TWIN 6.2KW                        |
|--|--|
| <b>PHASE</b>                                   | 1-phase in / 1 phase out                             |
| <b>MAXIMUM PV INPUT POWER</b>                  | 9000W (4500W x 2)                                    |
| <b>RATED OUTPUT POWER</b>                      | 7000W with PV & battery ;<br>6200W with battery only |
| <b>Maximum Charging Power</b>                  | 6000W  |
| <b>GRID-TIE OPERATION</b>                      |  |
| <b>PV INPUT (DC)</b>                           |  |
| Nominal DC Voltage / Maximum DC Voltage        | 360 VDC / 500 VDC                                    |
| Start-up Voltage / Initial Feeding Voltage     | 120 VDC / 150 VDC                                    |
| MPP Voltage Range                              | 120 VDC ~ 430 VDC                                    |
| Number of MPP Trackers / Maximum Input Current | 2 / 18 A+18A   |
| <b>GRID OUTPUT (AC)</b>                        |  |
| Nominal Output Voltage                         | 220/230/240 VAC                                      |
| Output Voltage Range                           | 184 - 264.5 VAC or 195.5 - 253 VAC (Selectable)      |
| Nominal Output Current                         | 30.44A   |
| Power Factor                                   | > 0.99   |
| <b>EFFICIENCY</b>                              |  |
| Maximum Conversion Efficiency (DC/AC)          | 96%  |
| <b>OFF-GRID OPERATION</b>                      |  |
| <b>AC INPUT</b>                                |  |
| AC Start-up Voltage / Auto Restart Voltage     | 120 - 140 VAC / 180 VAC                              |
| Acceptable Input Voltage Range                 | 90 - 280 VAC or 170 - 280 VAC                        |
| Frequency Range                                | 50 Hz/60 Hz (Auto sensing)                           |
| Maximum AC Input Current                       | 40 A   |
| <b>PV INPUT (DC)</b>                           |  |
| Maximum DC Voltage                             | 500 VDC  |
| MPP Voltage Range                              | 120 VDC ~ 430 VDC                                    |
| Number of MPP Trackers / Maximum Input Current | 2 / 18 A+18A   |
| <b>BATTERY MODE OUTPUT (AC)</b>                |  |
| Nominal Output Voltage                         | 220/230/240 VAC                                      |
| Output Waveform                                | Pure sinewave  |
| Efficiency (DC to AC)                          | 93%  |
| <b>HYBRID OPERATION</b>                        |  |
| <b>PV INPUT (DC)</b>                           |  |
| Nominal DC Voltage / Maximum DC Voltage        | 360 VDC / 500 VDC                                    |
| Start-up Voltage / Initial Feeding Voltage     | 120VDC / 150 VDC                                     |
| MPP Voltage Range                              | 120 VDC ~ 430 VDC                                    |
| Number of MPP Trackers / Maximum Input Current | 2 / 18 A+18A   |
| <b>GRID OUTPUT (AC)</b>                        |  |
| Nominal Output Voltage                         | 220/230/240 VAC                                      |
| Output Voltage Range                           | 184 - 264.5 VAC or 195.5 - 253 VAC (Selectable)      |
| Nominal Output Current                         |  |
| <b>AC INPUT</b>                                |  |
| AC Start-up Voltage / Auto Restart Voltage     | 120 - 140 VAC / 180 VAC                              |
| Acceptable Input Voltage Range                 | 90 - 280 VAC or 170 - 280 VAC                        |
| Maximum AC Input Current                       | 40A  |
| <b>BATTERY MODE OUTPUT (AC)</b>                |  |
| Nominal Output Voltage                         | 220/230/240 VAC                                      |
| Output Waveform                                | Pure sine wave                                       |
| Nominal Output Current                         | 27A  |
| Efficiency (DC to AC)                          | 93%  |
| <b>BATTERY &amp; CHARGER</b>                   |  |
| Nominal DC Voltage                             | 48 VDC   |
| Maximum Solar Charging Current                 | 130A   |
| Maximum AC Charging Current                    | 120A   |
| Maximum Charging Current                       | 130A   |
| <b>GENERAL</b>                                 |  |
| <b>PHYSICAL</b>                                |  |
| Dimension, D x W x H (mm)                      | 138.4 x 338 x 491.8                                  |
| Net Weight (kgs)                               | 12.3   |
| <b>INTERFACE</b>                               |  |
| Parallel Function                              | Yes, 9 units   |
| Communication Port                             | USB/RS232/RS485/Wifi/Dry-contact                     |
| <b>ENVIRONMENT</b>                             |  |
| Humidity                                       | 0 ~ 90% RH (Non-condensing)                          |
| Operating Temperature                          | -10 to 50°C  |
| <b>PROTECTION &amp; CERTIFICATE</b>            |  |
| Standard                                       | IEC 61000, IEC62109, IEC61683, IEC62116, IEC61727    |

Product specifications are subject to change without further notice.

# OFF- GRID INVERTER

## Axpert MAX TWIN



- Dual outputs, for smart load management
- Maximum PV input current increases to 27A
- Wide PV input voltage range 90VDC ~ 450VDC
- Replaceable fan design for ease of maintenance
- Built-in Wi-Fi for mobile monitoring (Android/iOS App is available)
- Compatible to Utility Mains or generator input
- Reserved communication port for BMS (RS485, CAN-BUS or RS232)
- Status indication with RGB lights
- Battery independent design
- Selectable high power charging current
- Supports USB On-the-Go function
- Built-in anti-dust kit
- Parallel operation with 6 units



### Axpert MAX TWIN Off-Grid Inverter Selection Guide

| MODEL                                 | Axpert MAX TWIN 8K  | Axpert MAX TWIN 11K |
|---------------------------------------|---|---------------------|
| Rated Power                           | 8000VA/8000W  | 11000VA/11000W      |
| Parallel Capability                   | YES, 6 units  |                     |
| <b>INPUT</b>                          |   |                     |
| Voltage                               | 230 VAC   |                     |
| Selectable Voltage Range              | 170-280 VAC (For Personal Computers) ; 90-280 VAC (For Home Appliances) |                     |
| Frequency Range                       | 50 Hz/60 Hz (Auto sensing)  |                     |
| <b>OUTPUT</b>                         |   |                     |
| AC Voltage Regulation (Batt. Mode)    | 230VAC ± 5%   | 230VAC ± 5%         |
| Surge Power                           | 16000VA   | 22000VA             |
| Efficiency (Peak)                     | 93%   |                     |
| Transfer Time                         | 10 ms (For Personal Computers) ; 20 ms (For Home Appliances)            |                     |
| Waveform                              | Pure sine wave  |                     |
| DC Voltage                            | 12 VDC ± 5%, 100W   | N/A                 |
| <b>BATTERY</b>                        |   |                     |
| Battery Voltage                       | 48 VDC  | 48 VDC              |
| Floating Charge Voltage               | 54 VDC  | 54 VDC              |
| Overcharge Protection                 | 66 VDC  | 63 VDC              |
| <b>SOLAR CHARGER &amp; AC CHARGER</b> |   |                     |
| Solar Charger Type                    | MPPT  |                     |
| Maximum PV Array Power                | 8000W (4000W x 2)   | 11000W (5500W x 2)  |
| MPPT Range @ Operating Voltage        | 90 ~ 450 VDC  | 90 ~ 450 VDC        |
| Maximum PV Array Open Circuit Voltage | 500 VDC   | 500 VDC             |
| Maximum PV Input Current              | 27A x 2 (MAX 40A)   |                     |
| Maximum Solar Charge Current          | 120A  | 150A                |
| Maximum AC Charge Current             | 120A  | 150A                |
| Maximum Charge Current                | 120A  | 150A                |
| <b>PHYSICAL</b>                       |   |                     |
| Dimension, D x W x H (mm)             | 147.4 x 432.5 x 553.6   |                     |
| Net Weight (kgs)                      | 18.4  |                     |
| Communication Interface               | USB, RS232, RS485, WiFi, Dry-contact                                    |                     |
| <b>OPERATING ENVIRONMENT</b>          |   |                     |
| Humidity                              | 5% to 95% Relative Humidity(Non-condensing)                             |                     |
| Operating Temperature                 | -10°C to 50°C   |                     |
| Storage Temperature                   | -15°C to 60°C   |                     |
| <b>STANDARD</b>                       |   |                     |
| Compliance Safety                     | CE  |                     |

Product specifications are subject to change without further notice.



- Dual outputs for smart load management
- Two independent AC power sources connected and switched automatically
- Built-in current transformer sensor to meet self-consumption application
- Support external BTS (Battery Temperature Sensor) detection
- Built-in power status lighting indicators
- Built-in 2.8" colored LCD with slide operation
- Built-in Wi-Fi for mobile monitoring and OTA firmware upgrade
- Reserved communication port for BMS (RS485, CAN-BUS or RS232)
- Support optional GFCI, Rapid shutdown, AFCI detections
- Supports USB On-the-Go function
- Parallel operation with 6 units



## Axpert Ultra Off-Grid Inverter Selection Guide

| MODEL                                 | Axpert Ultra TWIN 8K   | Axpert Ultra TWIN 11K |
|---------------------------------------|--|-----------------------|
| Rated Power                           | 8000VA/8000W   | 11000VA/11000W        |
| Parallel Capability                   | YES, 6 units   |                       |
| <b>INPUT</b>                          |  |                       |
| Voltage                               | 230 VAC  |                       |
| Selectable Voltage Range              | 170-280 VAC (For Personal Computers) ; 90-280 VAC (For Home Appliances)                          |                       |
| Frequency Range                       | 50 Hz/60 Hz (Auto sensing)   |                       |
| <b>OUTPUT</b>                         |  |                       |
| AC Voltage Regulation (Batt. Mode)    | 230VAC ± 5%  |                       |
| Surge Power                           | 16000VA  | 22000VA               |
| Efficiency (Peak)                     | 93%  |                       |
| Transfer Time                         | 10 ms (For Personal Computers) ; 20 ms (For Home Appliances)                                     |                       |
| Waveform                              | Pure sine wave   |                       |
| <b>BATTERY</b>                        |  |                       |
| Battery Voltage                       | 48 VDC   |                       |
| Floating Charge Voltage               | 54 VDC   |                       |
| Overcharge Protection                 | 63 VDC   |                       |
| <b>SOLAR CHARGER &amp; AC CHARGER</b> |  |                       |
| Solar Charger Type                    | MPPT   |                       |
| Maximum PV Array Power                | 10000W (5000W × 2)   | 12000W (6000W × 2)    |
| MPPT Range @ Operating Voltage        | 90 ~ 450 VDC   |                       |
| Maximum PV Array Open Circuit Voltage | 500 VDC  |                       |
| Maximum PV Input Current              | 27A × 2 (MAX 40A)  |                       |
| Maximum Solar Charge Current          | 150A   | 150A                  |
| Maximum AC Charge Current             | 120A   | 150A                  |
| Maximum Charge Current                | 150A   | 150A                  |
| <b>PHYSICAL</b>                       |  |                       |
| Dimension, D x W x H (mm)             | 145 × 438 × 553.6  |                       |
| Net Weight (kgs)                      | 18.4   |                       |
| Communication Interface               | USB, RS232, RS485, WiFi, Dry-contact, BTS, Support optional GFCI, Rapid shutdown, AFCI detection |                       |
| External Current Sensor Port          | Yes, built-in current transformer sensor   |                       |
| <b>OPERATING ENVIRONMENT</b>          |  |                       |
| Humidity                              | 5% to 95% Relative Humidity(Non-condensing)  |                       |
| Operating Temperature                 | -10°C to 50°C  |                       |
| Storage Temperature                   | -15°C to 60°C  |                       |
| <b>STANDARD</b>                       |  |                       |
| Compliance Safety                     | CE   |                       |

Product specifications are subject to change without further notice.



- IP66 certified enclosure
- Built-in 2 MPP trackers
- Maximum PV input current increases to 21A/27A
- Dual output for smart load control
- Two independent AC power sources connected and switched automatically
- Programmable supply priority for PV, Battery or Grid
- Built-in communication port for BMS (RS485)
- User-adjustable charging current and voltage
- Parallel operation up to 9 units
- Support storing energy from diesel generator



## Infini V4 WP Elite Hybrid Inverter Selection Guide

| MODEL  | Infini V 4 WP 6.6KW Elite   | Infini V 4 WP 10.6KW Elite |
|--|---|----------------------------|
| <b>PHASE</b>                                   | 1-phase in / 1-phase out  |                            |
| <b>MAXIMUM PV INPUT POWER</b>                  | 12000W  | 18000W                     |
| <b>RATED OUTPUT POWER</b>                      | 6600VA/6600W  | 10600VA/10600W             |
| <b>MAXIMUM CHARGING POWER</b>                  | 6600W   | 10600W                     |
| <b>GRID OUTPUT (AC)</b>                        |   |                            |
| Nominal Output Voltage                         | 220/230/240 VAC   |                            |
| Output Voltage Range                           | 184 - 264.5 VAC or 195.5 - 253 VAC or 182 - 260 VAC (Selectable)              |                            |
| Nominal Output Current                         | 28.7A   | 28.7A                      |
| Power Factor                                   |   |                            |
| Maximum Conversion Efficiency (DC/AC)          | 95%   | 96%                        |
| <b>OFF-GRID OPERATION</b>                      |   |                            |
| <b>AC INPUT</b>                                |   |                            |
| AC Start-up Voltage / Auto Restart Voltage     | 60 - 80 VAC / 180 VAC   |                            |
| Acceptable Input Voltage Range                 | 90 - 280 VAC or 170 - 280 VAC   |                            |
| Frequency Range                                | 50 Hz/60 Hz (Auto sensing)  |                            |
| Maximum AC Input Current                       | 40 A  | 60 A                       |
| <b>PV INPUT (DC)</b>                           |   |                            |
| Maximum DC Voltage                             | 500 VDC   |                            |
| MPP Voltage Range                              | 120 VDC ~ 450 VDC   |                            |
| Number of MPP Trackers / Maximum Input Current | 2 / 21A   | 2 / 27A                    |
| <b>BATTERY MODE OUTPUT (AC)</b>                |   |                            |
| Nominal Output Voltage                         | 220/230/240 VAC   |                            |
| Output Waveform                                | Pure sine wave  |                            |
| Efficiency (DC to AC)                          | 90% - 93%   |                            |
| <b>AC INPUT</b>                                |   |                            |
| AC Start-up Voltage / Auto Restart Voltage     | 60 - 80 VAC / 180 VAC   |                            |
| Acceptable Input Voltage Range                 | 90 - 280 VAC or 170 - 280 VAC   |                            |
| Maximum AC Input Current                       | 40A   | 60A                        |
| <b>BATTERY MODE OUTPUT (AC)</b>                |   |                            |
| Nominal Output Voltage                         | 220/230/240 VAC   |                            |
| Output Waveform                                | Pure sine wave  |                            |
| Efficiency (DC to AC)                          | 93%   |                            |
| <b>BATTERY &amp; CHARGER</b>                   |   |                            |
| Battery Type                                   | Lead-acid or Lithium-ion  |                            |
| Battery Voltage Range (V)                      | 40-60VDC  |                            |
| Nominal DC Voltage                             | 48 VDC  |                            |
| Maximum Solar Charging Current                 | 135A  | 210A                       |
| Maximum AC Charging Current                    | 135A  | 210A                       |
| Maximum Charging Current                       | 135A  | 210A                       |
| <b>PHYSICAL</b>                                |   |                            |
| Dimension, D x W x H (mm)                      | 192 x 418 x 633   |                            |
| Net Weight (kgs)                               | 29  | 33                         |
| <b>INTERFACE</b>                               |   |                            |
| Parallel Function                              | Yes, 9 units  |                            |
| Communication Port                             | RS-232/RS485, WIFI  |                            |
| <b>ENVIRONMENT</b>                             |   |                            |
| Humidity                                       | 0 ~ 100% RH (No condensing)   |                            |
| Operating Temperature                          | -10°C to 50°C   |                            |
| <b>PROTECTION &amp; CERTIFICATE</b>            |   |                            |
| Safety/EMC Standard                            | IEC/EN 62109-1 ,IEC/EN 62109-2,IEC/EN 61000-6-2/4,IEC 61683,IEC62116,IEC61727 |                            |

Product specifications are subject to change without further notice.





- IP66 certified enclosure
- 7" HMI LCD design for easy configuration
- Built-in 3 MPP trackers based on models
- Maximum PV input current increases to 28A
- Dual output for smart load control
- Two independent AC power sources connected and switched automatically
- Programmable supply priority for PV, Battery or Grid
- Built-in communication port for BMS (RS485)
- User-adjustable charging current and voltage
- Parallel operation up to 9 units
- Support storing energy from diesel generator



## Infini V4 WP Elite HMI Hybrid Inverter Selection Guide

| MODEL  | Infini V4 WP Elite 12KW  |
|--|--|
| <b>PHASE</b>                                   | 1-phase in / 1-phase out   |
| <b>MAXIMUM PV INPUT POWER</b>                  | 24000W   |
| <b>RATED OUTPUT POWER</b>                      | 12000VA/12000W   |
| <b>MAXIMUM CHARGING POWER</b>                  | 12000W   |
| <b>GRID OUTPUT (AC)</b>                        |  |
| Nominal Output Voltage                         | 220/230/240 VAC  |
| Output Voltage Range                           | 184 - 264.5 VAC or 195.5 - 253 VAC or 182 - 260 VAC (Selectable)             |
| Nominal Output Current                         | 52.18  |
| Power Factor                                   | > 0.99   |
| Maximum Conversion Efficiency (DC/AC)          | >97%   |
| <b>AC INPUT</b>                                |  |
| AC Start-up Voltage / Auto Restart Voltage     | 60 - 80 VAC / 180 VAC  |
| Acceptable Input Voltage Range                 | 90 - 280 VAC or 170 - 280 VAC  |
| Frequency Range                                | 50 Hz/60 Hz (Auto sensing)   |
| Maximum AC Input Current                       | 70 A   |
| <b>PV INPUT (DC)</b>                           |  |
| Maximum DC Voltage                             | 500 VDC  |
| MPP Voltage Range                              | 120 VDC ~ 450 VDC  |
| Number of MPP Trackers / Maximum Input Current | 3 / 28A  |
| Number of Strings Per MPP Tracker              | 2  |
| <b>BATTERY MODE OUTPUT (AC)</b>                |  |
| Nominal Output Voltage                         | 220/230/240 VAC  |
| Output Waveform                                | Pure sine wave   |
| Efficiency (DC to AC)                          | 93%  |
| <b>BATTERY &amp; CHARGER</b>                   |  |
| Battery Type                                   | Lead-acid or Lithium-ion   |
| Battery Voltage Range (V)                      | 40-60VDC   |
| Nominal DC Voltage                             | 48 VDC   |
| Maximum Solar Charging Current                 | 220A   |
| Maximum AC Charging Current                    | 220A   |
| Maximum Charging Current                       | 220A   |
| <b>PHYSICAL</b>                                |  |
| Dimension, D x W x H (mm)                      | 167 x 494 x 630  |
| Net Weight (kgs)                               | 40   |
| <b>INTERFACE</b>                               |  |
| Parallel Function                              | Yes, 9 units   |
| Communication Port                             | RS-232/RS485, WIFI   |
| <b>ENVIRONMENT</b>                             |  |
| Humidity                                       | 0 ~ 90% RH<br>(No condensing)  |
| Operating Temperature                          | -10°C to 50°C  |
| <b>PROTECTION &amp; CERTIFICATE</b>            |  |
| Safety/EMC Standard                            | IEC/EN 62920, IEC/EN 62109-1/-2, IEC61683, IEC62116, IEC61727, EN50549-1/-10 |

Product specifications are subject to change without further notice.

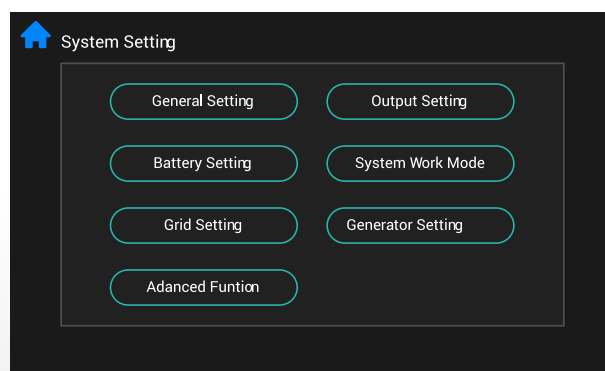
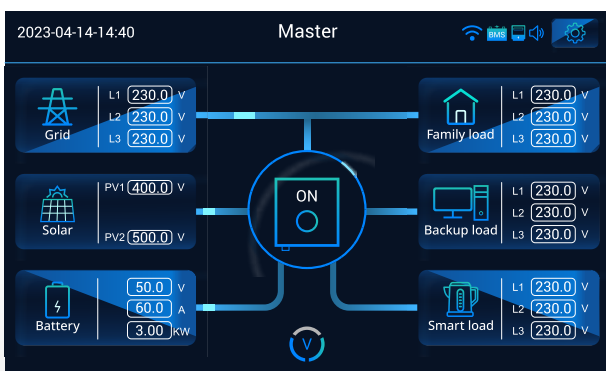


- IP66 certified enclosure
- User-friendly HMI LCD design for easy configuration
- Built-in WiFi for mobile monitoring (App is available)
- Reserved communication port for BMS (RS485)
- 150% unbalanced load support
- 26A maximum PV input current
- Dual outputs for smart load management
- User-adjustable charging current
- Parallel operation up to 6 units



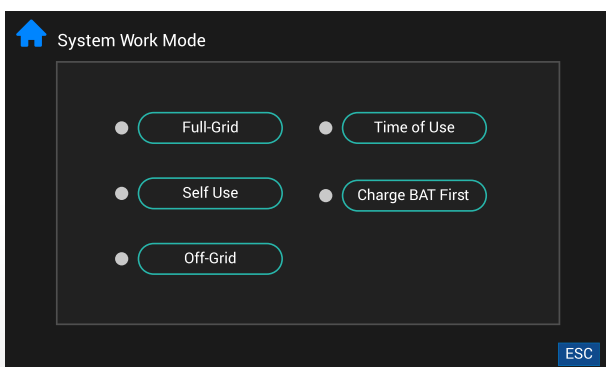
## User-friendly HMI LCD simplify the initial setup

Important information presented on main screen and parameter settings are grouped by function



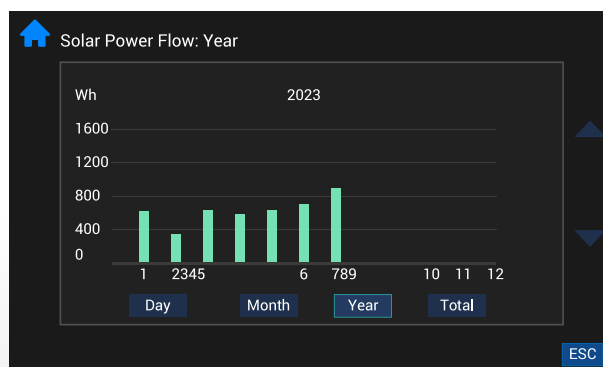
Password protected calibration menu for easy maintenance.

### Five preset scenarios to simplify setup



Set the priority to power the load, AC charging time, and feed in to the grid based on selected operation mode.

### Statistical graphs for Grid Power, Solar Power, Family Power and Backup Power



Visualize daily, monthly, annual and total power generation.

**InfniSolar WP TWIN HMI Three Phase Hybrid Inverter Selection Guide**

| <b>MODEL</b>                                   |  | <b>InfniSolar WP TWIN HMI 15kw</b>                  |
|--|--|---|
| Maximum PV Input Power                         |  | 22500 W   |
| Rated Output Power                             |  | 15000 W   |
| Maximum Charging Power                         |  | 15000 W   |
| <b>GRID-TIE OPERATION</b>                      |  |   |
| <b>PV INPUT (DC)</b>                           |  |   |
| Nominal DC Voltage / Maximum DC Voltage        |  | 720 VDC / 1000 VDC                                  |
| Start-up Voltage / Initial Feeding Voltage     |  | 320 VDC / 350 VDC                                   |
| MPP Voltage Range                              |  | 350 VDC ~ 950 VDC                                   |
| Number of MPP Trackers / Maximum Input Current |  | 2 / A: 26A, B: 26A                                  |
| Number of Strings Per MPP Tracker              |  | A: 2, B: 2  |
| <b>GRID OUTPUT (AC)</b>                        |  |   |
| Nominal Output Voltage                         |  | 230 VAC (P-N) / 400 VAC (P-P)                       |
| Output Voltage Range                           |  | 184 - 265 VAC per phase                             |
| Nominal Output Current                         |  | 21.7 A per phase                                    |
| Power Factor Range                             |  | 0.9 lag ~ 0.9 lead                                  |
| <b>EFFICIENCY</b>                              |  |   |
| Maximum Conversion Efficiency (DC/AC)          |  | > 96%   |
| European Efficiency@ Vnominal                  |  | > 95%   |
| <b>OFF-GRID OPERATION</b>                      |  |   |
| <b>AC INPUT</b>                                |  |   |
| AC Start-up Voltage / Auto Restart Voltage     |  | 120 - 140 VAC / 180 VAC                             |
| Acceptable Input Voltage Range                 |  | 170 - 290 VAC per phase                             |
| Maximum AC Input Current                       |  | 40 A  |
| <b>PV INPUT (DC)</b>                           |  |   |
| Maximum DC Power                               |  | 22500 W   |
| Maximum DC Voltage                             |  | 1000 VDC  |
| MPP Voltage Range                              |  | 350 VDC ~ 950 VDC                                   |
| Number of MPP Trackers / Maximum Input Current |  | 2 / A: 26A, B: 26A                                  |
| Number of Strings Per MPP Tracker              |  | A: 2, B: 2  |
| <b>BATTERY MODE OUTPUT (AC)</b>                |  |   |
| Nominal Output Voltage                         |  | 230 VAC (P-N) / 400 VAC (P-P)                       |
| Output Waveform                                |  | Pure sinewave                                       |
| Efficiency (DC to AC)                          |  | 91%   |
| <b>HYBRID OPERATION</b>                        |  |   |
| <b>PV INPUT (DC)</b>                           |  |   |
| Maximum DC Voltage                             |  | 1000 VDC  |
| Start-up Voltage / Initial Feeding Voltage     |  | 320 VDC / 350 VDC                                   |
| MPP Voltage Range                              |  | 350 VDC ~ 950 VDC                                   |
| Number of MPP Trackers / Maximum Input Current |  | 2 / A: 26A, B: 26A                                  |
| Number of Strings Per MPP Tracker              |  | A: 2, B: 2  |
| <b>GRID OUTPUT (AC)</b>                        |  |   |
| Nominal Output Voltage                         |  | 230 VAC (P-N) / 400 VAC (P-P)                       |
| Output Voltage Range                           |  | 184 - 265 VAC per phase                             |
| Nominal Output Current                         |  | 21.7 A Per phase                                    |
| <b>AC INPUT</b>                                |  |   |
| AC Start-up Voltage / Auto Restart Voltage     |  | 120 - 140 VAC / 180 VAC                             |
| Acceptable Input Voltage Range                 |  | 170 - 290 VAC per phase                             |
| Maximum AC Input Current                       |  | 40 A  |
| <b>BATTERY MODE OUTPUT (AC)</b>                |  |   |
| Nominal Output Voltage                         |  | 230 VAC (P-N) / 400 VAC (P-P)                       |
| Efficiency (DC to AC)                          |  | 91%   |
| <b>BATTERY &amp; CHARGER</b>                   |  |   |
| Battery Voltage Range                          |  | 40 ~ 62 VDC   |
| Maximum Charging Current                       |  | 300 A   |
| <b>GENERAL</b>                                 |  |   |
| <b>PHYSICAL</b>                                |  |   |
| Dimension, D x W x H (mm)                      |  | 255 x 660 x 750                                     |
| Net Weight (kgs)                               |  | 78  |
| <b>INTERACE</b>                                |  |   |
| Communication Port                             |  | RS-232, RS-485, USB, CAN and Wi-Fi                  |
| Intelligent Slot                               |  | Intelligent Slot Optional for SNMP and Modbus cards |
| <b>ENVIRONMENT</b>                             |  |   |
| Humidity                                       |  | 0 ~ 100% RH (Non-condensing)                        |
| Operating Temperature                          |  | -25 to 60°C, >45°C power derating                   |
| Altitude                                       |  | 0 ~ 1000 m**  |
| <b>PROTECTION &amp; CERTIFICATE</b>            |  |   |
| Safety   |  | IEC 62109, IEC 62116, IEC 61727, IEC 61683          |
| Grid Connection Standard                       |  | NRS097-2-1:2017, VDE-AR-N4105, G99                  |

\*These figures are based on VDE-4105 standard. All figures may vary depending on different AC voltage and country requirements.

\*\* Power derating 1% every 100m when altitude is over 1000m. Product specifications are subject to change without further notice.

# Solis Three Phase High Voltage Energy Storage Inverters

## S6-EH3P 20K-H

### Models:

S6-EH3P20K



### Features:

- Generator-compatible to extend backup duration during grid power outage
- Supports dual backup ports for intelligent control of critical and non-critical loads
- SG heat pump compatibility
- Supports a maximum input current of 20A, making it ideal for all high-power PV modules of any brand
- Supports AC voltage detection of grid and generator output to prevent damage to generators from reverse current from the grid
- Supports peak shaving features
- Supports Unbalanced and Half-Wave Loads on both the Grid and Backup Port

**S6-EH3P 20K-H**

| Models  | 20KW  |
|---|---|
| <b>Input DC (PV side)</b>                       |   |
| Recommended max. PV array size                  | 40 kW   |
| Max. usable PV input power                      | 32 kW   |
| Max. input voltage                              | 1000 V  |
| Rated voltage                                   | 600 V   |
| Start-up voltage                                | 160 V   |
| MPPT voltage range                              | 200 - 850 V   |
| Max. input current                              | 4 × 20 A  |
| Max. short circuit current                      | 4 × 30 A  |
| MPPT number / Max. input strings number         | 4 / 4   |
| <b>Battery</b>                                  |   |
| Battery type                                    | Li-ion  |
| Battery voltage range                           | 120 - 800 V   |
| Max. charge / discharge power                   | 20 kW   |
| Max. charge / discharge current                 | 50 A  |
| Communication                                   | CAN / RS485   |
| <b>Output AC (Grid side)</b>                    |   |
| Rated output power                              | 20 kW   |
| Max. apparent output power                      | 20 kVA  |
| Rated grid voltage                              | 3/N/PE, 220 V / 380 V, 230 V / 400 V  |
| Rated grid frequency                            | 50 Hz / 60 Hz   |
| Rated grid output current                       | 30.4 A / 28.9 A   |
| Max. output current                             | 30.4 A / 28.9 A   |
| Power factor                                    | > 0.99 (0.8 leading - 0.8 lagging)  |
| THDi  | < 3%  |
| <b>Input AC (Grid side)</b>                     |   |
| Input voltage range                             | 304 - 437 V / 320 - 460 V   |
| Max. input current                              | 45.6 A / 43.3 A   |
| Rated grid frequency                            | 50 Hz / 60 Hz   |
| Frequency range                                 | 45 - 55 Hz / 55 - 65 Hz   |
| <b>Input Generator</b>                          |   |
| Max. input power                                | 20 kW   |
| Max. input current                              | 30.4 A / 28.9 A   |
| Rated input frequency                           | 50 Hz / 60 Hz   |
| <b>Output AC (Back-up)</b>                      |   |
| Rated output power                              | 20 kW   |
| Max. apparent output power                      | 1.6 time of rated power, 10 s   |
| Back-up switch time                             | < 10 ms   |
| Rated output voltage                            | 3/N/PE, 220 V / 380 V, 230 V / 400 V  |
| Rated frequency                                 | 50 Hz / 60 Hz   |
| Rated output current                            | 30.4 A / 28.9 A   |
| THDv (@linear load)                             | < 3%  |
| <b>Efficiency</b>                               |   |
| Max. efficiency                                 | 97.7%   |
| EU efficiency                                   | 97.5%   |
| BAT charged by PV max. efficiency               | 98.5%   |
| BAT charged / discharged to AC max. efficiency  | 97.2%   |
| <b>Protection</b>                               |   |
| Anti-islanding protection                       | Yes   |
| Output over current protection                  | Yes   |
| Short circuit protection                        | Yes   |
| Integrated AFCI 2.0                             | Optional  |
| Integrated DC switch                            | Yes   |
| DC reverse-polarity protection                  | Yes   |
| PV over voltage protection                      | Yes   |
| Battery reverse protection                      | Yes   |
| <b>General Data</b>                             |   |
| Max. allowable phase imbalance (grid & back-up) | 100%  |
| Max. power per phase (grid & back-up)           | 40% rated power   |
| Dimensions (W × H × D)                          | 563 × 546 × 250 mm  |
| Weight  | 35.2 kg   |
| Topology  | Transformerless   |
| Self-consumption (night)                        | < 25 W  |
| Operating ambient temperature range             | -25 ~ +60°C   |
| Relative humidity                               | 0 - 95%   |
| Ingress protection                              | IP66  |
| Noise emission (typical)                        | < 65 dB(A)  |
| Cooling concept                                 | Intelligent fan-cooling   |
| Max. operation altitude                         | 2000 m  |
| Grid connection standard                        | EN 50549-1/-10, VDE4105, CEI 0-21, CEI 0-16, NC-RFG TypeB, NRS 097-2-1, LTU-1, G99, PEA |
| Safety / EMC standard                           | IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4  |
| <b>Features</b>                                 |   |
| PV connection                                   | MC4 connector   |
| Battery connection                              | OT terminal   |
| AC connection                                   | OT terminal   |
| Display   | 7.0" LCD display & Bluetooth + APP  |
| Communication                                   | CAN, RS485, Ethernet, Optional: Wi-Fi, Cellular, LAN                                    |

# Solis Three Phase High Voltage Energy Storage Inverters

## S6-EH3P(30-50)K-H

### Models:

S6-EH3P30K-H

S6-EH3P50K-H



### Features:

- 2 seconds of 160% overload capability
- Supports a maximum input current of 20A, making it ideal for all high-power PV modules of any brand
- Real-time battery monitoring, remote upgrade, and battery healing function to prolong battery life
- Supports peak shaving features in "self-use" and "generator" modes
- Supports Unbalanced and Half-Wave Loads on both the Grid and Backup Port
- A wide battery voltage range accommodates the prevalent high-voltage lithium batteries found in the market
- Battery charging/discharging current 140A/70A+70A, suitable for 280Ah cell standard 0.5C application condition
- Supports 200% DC/AC ratio and makes full use of PV charging, providing a long backup

# Solis Three Phase High Voltage Energy Storage Inverters

## S6-EH3P(30-50)K-H

### S6-EH3P(29.9-50)K-H

| Models   | 30KW  | 50KW            |
|--|---|-----------------|
| <b>Input DC (PV side)</b>                      |   |                 |
| Recommended max. PV array size                 | 60 kW   | 100 kW          |
| Max. usable PV input power                     | 60 kW   | 96 kW           |
| Max. input voltage                             | 1000 V  |                 |
| Rated voltage                                  | 600 V   |                 |
| Start-up voltage                               | 180 V   |                 |
| MPPT voltage range                             | 150 - 850 V   |                 |
| Max. input current                             | 40 A / 40 A / 40 A  | 4 × 40 A        |
| Max. short circuit current                     | 60 A / 60 A / 60 A  | 4 × 60 A        |
| MPPT number / Max. input strings number        | 3 / 6   | 4 / 8           |
| <b>Battery</b>                                 |   |                 |
| Battery type                                   | Li-ion  |                 |
| Battery voltage range                          | 150 - 800 V   |                 |
| Max. charge / discharge power                  | 33 kW   | 55 kW           |
| Max. charge / discharge current                | 70 A × 2 <sup>(1)</sup>   |                 |
| No. of battery inputs                          | 2   |                 |
| Max. charge / discharge power of each input    | 33 kW   | 35 kW           |
| Communication                                  | CAN / RS485   |                 |
| <b>Output AC (Grid side)</b>                   |   |                 |
| Rated output power                             | 30 kW   | 50 kW           |
| Max. apparent output power                     | 30 kVA  | 50 kVA          |
| Rated grid voltage                             | 3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V  |                 |
| Rated grid frequency                           | 50 Hz / 60 Hz   |                 |
| Rated grid output current                      | 45.6 A / 43.3 A   | 76 A / 72.2 A   |
| Max. output current                            | 45.6 A / 43.3 A   | 76 A / 72.2 A   |
| Power factor                                   | > 0.99 (0.8 leading - 0.8 lagging )   |                 |
| THDi   | < 3%  |                 |
| <b>Input AC (Grid side)</b>                    |   |                 |
| Max. AC passthrough current                    | 91.2 A / 86.6 A   | 152 A / 144.4 A |
| Rated input voltage                            | 3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V  |                 |
| Rated input frequency                          | 50 Hz / 60 Hz   |                 |
| <b>Input Generator</b>                         |   |                 |
| Max. input power                               | 30 kW   | 50 kW           |
| Rated input current                            | 45.6 A / 43.3 A   | 76 A / 72.2 A   |
| Rated input voltage                            | 3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V  |                 |
| Rated input frequency                          | 50 Hz / 60 Hz   |                 |
| <b>Output AC (Back-up)</b>                     |   |                 |
| Rated output power                             | 30 kW   | 50 kW           |
| Max. apparent output power                     | 1.6 times of rated power, 2 s   |                 |
| Back-up switch time                            | < 10 ms   |                 |
| Rated output voltage                           | 3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V  |                 |
| Rated frequency                                | 50 Hz / 60 Hz   |                 |
| Rated output current                           | 45.6 A / 43.3 A   | 76 A / 72.2 A   |
| THDv (@linear load)                            | < 2%  |                 |
| <b>Efficiency</b>                              |   |                 |
| Max. efficiency                                | 97.8%   |                 |
| EU efficiency                                  | 97.4%   |                 |
| BAT charged by PV max. efficiency              | 98.5%   |                 |
| BAT charged / discharged to AC max. efficiency | 97.5%   |                 |
| <b>Protection</b>                              |   |                 |
| Anti-islanding protection                      | Yes   |                 |
| Output over current protection                 | Yes   |                 |
| Short circuit protection                       | Yes   |                 |
| Integrated DC switch                           | Yes   |                 |
| DC reverse-polarity protection                 | Yes   |                 |
| Surge protection                               | DC Type II / AC Type II   |                 |
| Integrated AFCI 2.0                            | Optional  |                 |
| <b>General Data</b>                            |   |                 |
| Dimensions (W × H × D)                         | 530 × 880 × 290 mm  |                 |
| Weight   | 73 kg   |                 |
| Topology                                       | Transformerless   |                 |
| Self-consumption (night)                       | < 35 W  |                 |
| Operating ambient temperature range            | -25 ~ +60°C   |                 |
| Relative humidity                              | 0 - 95%   |                 |
| Ingress protection                             | IP66  |                 |
| Cooling concept                                | Intelligent fan-cooling   |                 |
| Max. operation altitude                        | 4000 m  |                 |
| Grid connection standard                       | G99, VDE-AR-N 4105/VDE V 0124, EN 50549-1/EN 50549-10, VDE 0126/UTE C 15/VFR:2019, NTS 631/RD 1699/RD 244/UNE 206006/UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, MEA, PEA, PORTARIA Nº 140, DE 21 DE MARÇO DE 2022 |                 |
| Safety / EMC standard                          | IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4, EN 55011  |                 |
| <b>Features</b>                                |   |                 |
| PV connection                                  | MC4 Quick connection plug   |                 |
| Battery connection                             | Terminal connector  |                 |
| AC connection                                  | Terminal Block  |                 |
| Display  | 7.0" LCD display & Bluetooth + APP  |                 |
| Communication                                  | CAN, RS485, Ethernet, Optional: Wi-Fi, Cellular, LAN  |                 |

(1) Supporting parallel 140A input.

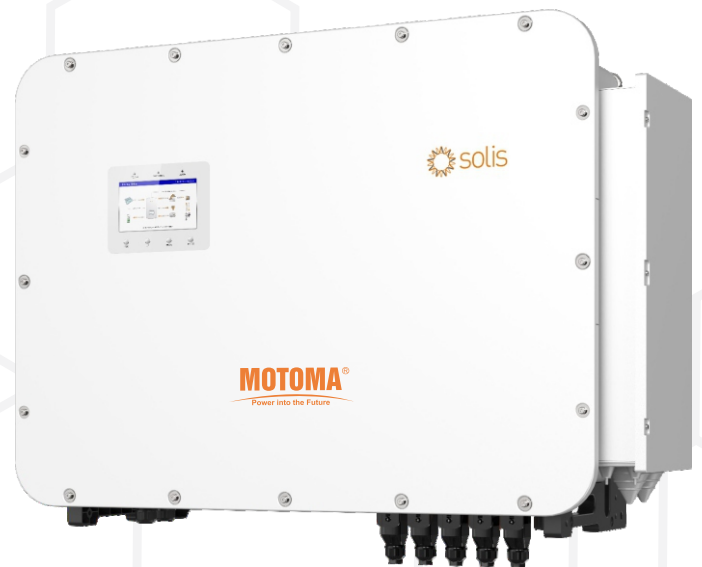
**80-125K**

# SOLARATOR SERIES

Experience Uninterrupted Power with Solis Energy Storage Inverters

**S6-EH3P(80-125)K10-NV-YD-H**

Three Phase | High Voltage



## 12 Unique Advantages

- Supports up to 2x rated PV input, maximizing solar energy utilization
- Supports a maximum string input current of 21A, ensuring compatibility with high-power PV modules
- Compatible with 100-314Ah battery modules, reducing overall system costs
- Supports fast battery charging with a maximum charging current of 200A
- Two independent battery ports for flexible configurations and easy capacity expansion
- Delivers 160% overload for 200ms in off-grid mode, ensuring stable startup of heavy loads
- Offers flexible control for weak grid and genset-hybrid scenarios, reducing investment costs
- SolisCloud: Smart remote control, AI optimisation, and instant troubleshooting - all in one platform
- Integrates PV and storage for demand management and anti-reverse flow functions
- Provides dynamic reactive power compensation to improve grid power factor and reduce reactive power charges
- Utility bypass function allows direct grid supply to backup loads
- Patented cooling technology ensures reliable operation even under high-temperature conditions

## 6 Leading Advantages

- Supports both DC and AC coupling, for flexible retrofits and system expansions
- Ensures reliable backup power across diverse scenarios through battery reserve management
- Extends supply time for critical loads with intelligent load prioritization
- Offers a versatile three-in-one interface for seamless integration of on-grid PV, wind power, and diesel generators
- Achieves on- and off-grid transitions in less than 10ms, ensuring an uninterrupted power supply
- Supports multi-unit parallel operation up to 1.25MW (Solis STS cabinet recommended for systems over 6 units)

# Solis Three Phase High Voltage Energy Storage Inverters

## S6-EH3P(80-125)K10-NV-YD-H

| Models   | 80K   | 100K              | 125K              |
|--|---|-------------------|-------------------|
| <b>Input DC (PV side)</b>                      |   |                   |                   |
| Recommended max. PV array size                 | 160 kW  | 200 kW            | 250 kW            |
| Max. usable PV input power                     | 160 kW  | 200 kW            | 250 kW            |
| Max. input voltage                             | 1000 V  |                   |                   |
| Rated voltage                                  | 600 V   |                   |                   |
| Start-up voltage                               | 180 V   |                   |                   |
| MPPT voltage range                             | 150 - 950 V   |                   |                   |
| Max. input current                             | 10 × 42 A   |                   |                   |
| Max. short circuit current                     | 10 × 60 A   |                   |                   |
| MPPT number / Max. input strings number        | 10 / 20   |                   |                   |
| <b>Battery</b>                                 |   |                   |                   |
| Battery type                                   | Li-ion  |                   |                   |
| Battery voltage range                          | 300 - 950 V   |                   |                   |
| Max. charge / discharge current                | 100 A × 2 / 100 A × 2   |                   |                   |
| Number of battery ports                        | 2   |                   |                   |
| Max. charge / discharge current of each port   | 100 A   |                   |                   |
| Communication                                  | CAN / RS485   |                   |                   |
| <b>Output AC (Back-up)</b>                     |   |                   |                   |
| Rated output power                             | 80 kW   | 100 kW            | 125 kW            |
| Max. apparent output power                     | 75-100K: 1.6 times of rated power, 10 s; 2 times of rated power, 200 ms;<br>125K: 1.4 times of rated power, 10 s; 1.6 times of rated power, 200 ms  |                   |                   |
| Back-up switch time                            | < 10 ms   |                   |                   |
| Rated output voltage                           | 3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V  |                   |                   |
| Rated frequency                                | 50 Hz / 60 Hz   |                   |                   |
| THDv (@linear load)                            | < 3%  |                   |                   |
| <b>Input AC (Grid side)</b>                    |   |                   |                   |
| Max. input current                             | 250 A   |                   |                   |
| <b>Input AC (Generator)</b>                    |   |                   |                   |
| Max. input power                               | 80 kW   | 100 kW            | 125 kW            |
| Rated input current                            | 121.6 A / 115.5 A   | 151.9 A / 144.3 A | 189.9 A / 180.4 A |
| Rated input voltage                            | 3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V  |                   |                   |
| Rated input frequency                          | 50 Hz / 60 Hz   |                   |                   |
| <b>Output AC (Grid side)</b>                   |   |                   |                   |
| Rated output power                             | 80 kW   | 100 kW            | 125 kW            |
| Max. apparent output power                     | 80 kVA  | 100 kVA           | 125 kVA           |
| Rated grid voltage                             | 3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V  |                   |                   |
| Rated grid frequency                           | 50 Hz / 60 Hz   |                   |                   |
| Rated grid output current                      | 121.6 A / 115.5 A   | 151.9 A / 144.3 A | 189.9 A / 180.4 A |
| Power factor                                   | > 0.99 (0.8 leading - 0.8 lagging)  |                   |                   |
| THDi   | < 3%  |                   |                   |
| <b>Efficiency</b>                              |   |                   |                   |
| Max. efficiency                                | 97.5%   |                   |                   |
| EU efficiency                                  | 96.9%   | 97.1%             | 97.2%             |
| BAT charged / discharged to AC max. efficiency | 97.0%   |                   |                   |
| <b>Protection</b>                              |   |                   |                   |
| Anti-islanding protection                      | Yes   |                   |                   |
| Output over current protection                 | Yes   |                   |                   |
| Short circuit protection                       | Yes   |                   |                   |
| Integrated DC switch                           | Yes   |                   |                   |
| DC reverse-polarity protection                 | Yes   |                   |                   |
| Protection class / Over voltage category       | I/ DC II, AC III  |                   |                   |
| Surge protection                               | DC Type II / AC Type II   |                   |                   |
| Integrated AFCI 2.0                            | Optional (Brazil: Yes)  |                   |                   |
| <b>General Data</b>                            |   |                   |                   |
| Max. power per phase (grid & back-up)          | 26.66 kW  | 33.33 kW          | 41.66 kW          |
| Dimensions (W × H × D)                         | 1174 × 814 × 400 mm   |                   |                   |
| Weight   | 170 kg  |                   |                   |
| Topology                                       | Transformerless   |                   |                   |
| Operating ambient temperature range            | -25 ~ +60°C   |                   |                   |
| Relative humidity                              | 0 - 100%  |                   |                   |
| Ingress protection                             | IP66  |                   |                   |
| Cooling concept                                | Intelligent redundant fan-cooling   |                   |                   |
| Max. operation altitude                        | 3000 m  |                   |                   |
| Grid connection standard <sup>①</sup>          | G99, VDE-AR-N 4105/VDE V 0124, EN 50549-1&2/EN 50549-10, VDE 0126/UTE C 15/VFR:2019, NTS 631/RD 1699/RD 244/UNE 206006/UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, MEA, PEA, PORTARIA N° 140, DE 21 DE MARÇO DE 2022; Brazil (75K: ORDINANCE (PORTARIA) NO.140, ORDINANCE NO. 515; 100K/125K: NBR 16149, NBR 16150, IEC 62116) |                   |                   |
| Safety / EMC standard <sup>①</sup>             | IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4, EN 55011  |                   |                   |
| <b>Features</b>                                |   |                   |                   |
| PV connection                                  | MC4 Quick connection plug   |                   |                   |
| Battery connection                             | Terminal connector  |                   |                   |
| AC connection                                  | Terminal block  |                   |                   |
| Display  | 7.0" LCD display & Bluetooth + APP  |                   |                   |
| Communication interface                        | Standard: WIFI+LAN+Bluetooth, CAN-BMS × 2, CAN-Parallel × 2, LAN, RS485-Meter, RS485, DRM, DI × 5, DO × 4; Optional: 4G   |                   |                   |

<sup>①</sup> This column only shows the planned certification standards. Please confirm the specific time of obtaining the standards with the local team.