

# Battery Storage

## Li-5

- 10 years warranty
- Ultra safe LFP material
- Short circuit protection
- Flexible remote upgrade
- Wide range inverter compatibility
- Parallel up to 32 modules
- 1C rate continuous charge/discharge
- Multi protection to avoid over discharge
- Smart BMS management for longer lifespan
- Active balancing charging, low self consumption



# Specifications

Your Reliable  
Energy Solution  
Partner

| Model                         | Li-5   |
|-------------------------------|--|
| Cell Type                     | LFP  |
| Rated Power                   | 5.12kWh  |
| Rated Capacity                | 100Ah  |
| Rated Voltage                 | 51.2V  |
| Charge Voltage                | 56.5V  |
| Max. Charge/Discharge Current | 100A   |
| Discharge Peak Current        | 105A / 15s, 150A / 0.5s  |
| Parallel                      | Up to 32 units parallelable w/o extra device needed, slave battery drops offline or come back alive does not affect system running                           |
| IP Level                      | IP20   |
| Dimension(W*D*H mm)           | 452.6*165*481mm  |
| Weight                        | 50kg/110.2lbs  |
| Communication                 | CAN/RS485  |
| Compatible Inverter           | Victron, Luxpower, Deye, Voltronic, SMA Goodwe, Growatt, Sofar, Solark, SRNE, Must   |
| Humidity                      | 5%~85% RH (No condensation)  |
| Work Temperature              | 20 ~ +55 °C  |
| Storage Temperature           | -10 ~ +35 °C   |
| Remote Maintenance            | Flexible remote upgrade,<br>Original firmware backup to prevent upgrade failure  |
| Warranty *                    | 10 years, 6000 cycles  |
| Certification                 | CE UN38.3; IEC62619  |
| Protection                    | Overcharge/discharge/current/voltage/temperature protection<br>Short circuit protection, Reverse connection protection<br>Charge balance, Low SOC protection |

# TIGER Neo

## 60HL4-(V)

475-500 Watt

MONO-FACIAL MODULE

N-type



### N-type Technology

N-type modules with Tunnel Oxide Passivating Contacts (TOPcon) technology offer lower LID/LeTID degradation and better low light performance.



### Durability Against Extreme Environment

High salt mist and ammonia resistance.



### SMBB Technology

Better light trapping and current collection to improve module power output and reliability.



### HOT 3.0 Technology

N-type modules with JinkoSolar's HOT 3.0 technology offer better reliability and efficiency.



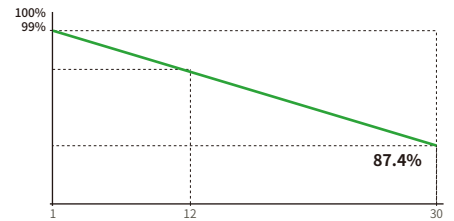
### Mechanical Load Enhanced

Certified to withstand:  
5400 Pa front side max static test load  
2400 Pa rear side max static test load



### Anti-PID Guarantee

Minimizes the chance of degradation caused by PID phenomena through optimization of cell production technology and material control.



|                                    |  |   |  |
|------------------------------------|--|---|--|
| <b>12</b> Year<br>Product Warranty | <b>30</b> Year<br>Linear Power<br>Warranty | <b>1</b> %<br>First-year<br>Degradation | <b>0.40</b> %<br>Annual Degradation<br>Over 30 Years |
|------------------------------------|--|---|--|

- IEC61215:2021 / IEC61730:2023
- IEC61701 / IEC62716 / IEC60068 / IEC62804
- ISO9001:2015: Quality Management System
- ISO14001:2015: Environment Management System
- ISO45001:2018: Occupational health and safety management systems



JKM475-500N-60HL4-(V)-F8-EN

# 60HL4-(V) 475-500 Watt

## Mechanical Characteristics

|                  |   |
|------------------|---|
| Cell Type        | N-type Mono-crystalline   |
| No. of cells     | 120 (60×2)  |
| Dimensions       | 1906×1134×30 mm   |
| Weight           | 22.5 kg   |
| Front Glass      | 3.2mm, Anti-reflection Coating, High Transmission, Low Iron, Tempered Glass |
| Frame            | Anodized Aluminium Alloy  |
| Junction Box     | IP68 Rated  |
| Protection Class | Class II  |
| IEC Fire Type    | Class C   |
| Connector Type   | JK03M/MC4/Others  |
| Output Cables    | 4.0 mm <sup>2</sup><br>(+): 400 mm , (-): 200 mm or Customized Length       |

## Packaging Configuration

|   |   |
|---|---|
| Pallet Dimensions                         | 1936×1140×1249 mm   |
| Packing detail<br>(Two pallets=One stack) | 37 pcs/pallets, 74 pcs/stack,<br>888 pcs/ 40'HQ Container |

## Specifications (STC)

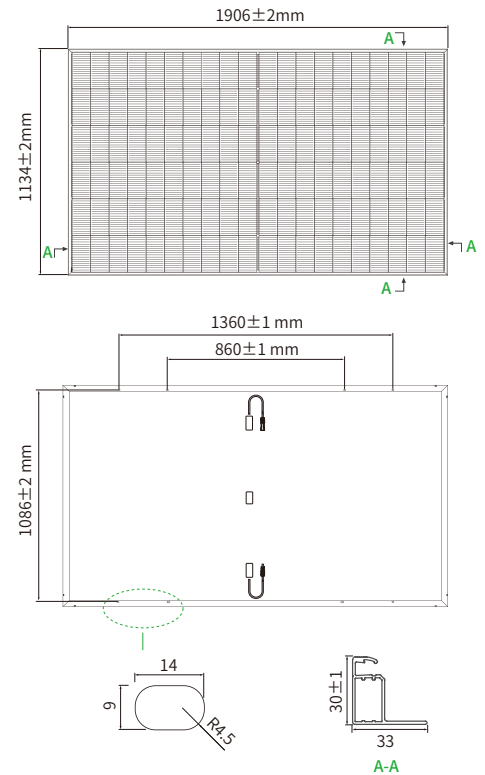
|                                  |            |       |       |       |       |       |
|----------------------------------|------------|-------|-------|-------|-------|-------|
| Maximum Power – Pmax [Wp]        | 475        | 480   | 485   | 490   | 495   | 500   |
| Maximum Power Voltage – Vmp [V]  | 35.88      | 36.06 | 36.25 | 36.43 | 36.62 | 36.79 |
| Maximum Power Current – Imp [A]  | 13.24      | 13.31 | 13.38 | 13.45 | 13.52 | 13.59 |
| Open-circuit Voltage – Voc [V]   | 43.45      | 43.60 | 43.76 | 43.91 | 44.07 | 44.21 |
| Short-circuit Current – Isc [A]  | 13.77      | 13.85 | 13.93 | 14.01 | 14.09 | 14.17 |
| Module Efficiency STC [%]        | 21.98      | 22.21 | 22.44 | 22.67 | 22.90 | 23.17 |
| Power Tolerance                  | 0 ~ + 3 %  |       |       |       |       |       |
| Temperature Coefficients of Pmax | -0.29 %/°C |       |       |       |       |       |
| Temperature Coefficients of Voc  | -0.25 %/°C |       |       |       |       |       |
| Temperature Coefficients of Isc  | 0.045 %/°C |       |       |       |       |       |

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, AM=1.5

## Application Conditions

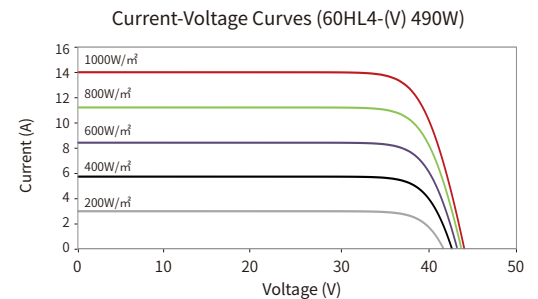
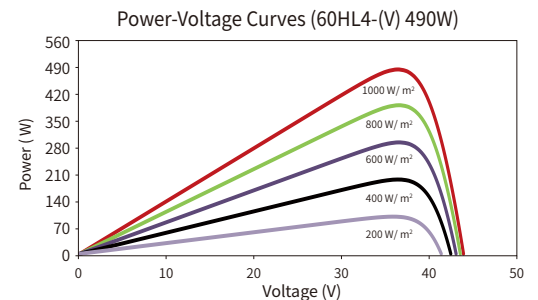
|                            |                     |
|----------------------------|---------------------|
| Operating Temperature      | -40 °C ~ +70°C      |
| Maximum System Voltage     | 1000/1500 VDC (IEC) |
| Maximum Series fuse Rating | 25 A                |

## Engineering Drawings



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

## Electrical Performance



# ECO HYBRID

Single-Phase

## SNA 12K

- 2 MPPTs with 4 strings, Max. 24kW PV input
- Max. charging and discharging current: 250A
- Off-grid application for high demand with 12kW output power
- Dual AC output ports for multiple load connections
- Separate GEN port
  - Up to 19.2kW Gen/AC coupling input
  - Auto generator start and stop control
- Integrated Design with Load and Battery Breaker
- PV or AC or Generator wake up battery



# Specification

| INPUT (PV DC)                                    |  | SNA 12K                            |
|--|--|------------------------------------|
| Max. PV array power (W)                          |  | 24000 (12000/12000)                |
| Rated PV input voltage (V)                       |  | 320                                |
| Number of independent MPPT inputs                |  | 2/(2:2)                            |
| PV input voltage range (V)                       |  | 100-480                            |
| MPPT voltage range (V)                           |  | 120-385                            |
| Start-up voltage (V)                             |  | 100                                |
| Max. PV input current per MPPT (A)               |  | 35/35                              |
| Max. PV short-circuit current input per MPPT (A) |  | 44/44                              |
| Battery  |  |                                    |
| Compatible battery type                          |  | Lithium-ion/Lead-Acid              |
| Rated battery voltage (V)                        |  | 48/51.2                            |
| Battery voltage range (V)                        |  | 46.4-60/38.4-60                    |
| Max. charging / discharging current (A)          |  | 250                                |
| Max. charging / discharging power (W)            |  | 12000                              |
| Force wake up battery from PV and Grid function  |  | YES                                |
| Grid   |  |                                    |
| Rated AC voltage (V)                             |  | 230                                |
| Acceptable Input Voltage Range (V)               |  | 90~280                             |
| Rated AC frequency (Hz)                          |  | 60/50                              |
| Rated AC input current (A)                       |  | 100                                |
| Rated AC input power (W)                         |  | 24000                              |
| PF   |  | 0.99                               |
| THDI   |  | <5%                                |
| Max. continuous AC passthrough current(A)        |  | 100                                |
| UPS  |  |                                    |
| Rated output power (W)                           |  | 12000                              |
| Rated output voltage (V)                         |  | 230                                |
| Rated output current (A)                         |  | 50                                 |
| Rated output frequency (Hz)                      |  | 50/60                              |
| Surge power, duration                            |  | 2Pn, 5s                            |
| Switching time (UPS)                             |  | <10ms@Single and Parallel          |
| Wave form  |  | Sine wave                          |
| THDV   |  | 3%                                 |
| GEN  |  |                                    |
| Acceptable input voltage range                   |  | 230                                |
| Max. AC input voltage (V)                        |  | 280                                |
| Max. AC input current (A)                        |  | 63                                 |
| Rated input frequency                            |  | 50Hz/60Hz (Auto detection)         |
| Transfer time                                    |  | <10ms@Single; <20ms@Parallel       |
| THDV   |  | <3%                                |
| Overload protection                              |  | 5s@≥150% load /10s@110%~150% load  |
| Efficiency                                       |  |                                    |
| Max. efficiency                                  |  | 93.5%                              |
| Max. charging / discharging efficiency           |  | 93.0%                              |
| Max. MPPT efficiency                             |  | 99.0%                              |
| Protection                                       |  |                                    |
| PV reverse polarity protection(Y/N)              |  | YES                                |
| Over current / voltage protection(Y/N)           |  | YES                                |
| AC Short-circuit current protection(Y/N)         |  | YES                                |
| Grid monitoring(Y/N)                             |  | YES                                |
| DC switch(Y/N)                                   |  | YES                                |
| DC / AC Surge protection Type III                |  | YES                                |
| Battery reverse polarity protection(Y/N)         |  | YES                                |
| General  |  |                                    |
| Dimensions ( W*H*D mm )                          |  | 530*830*150mm(17.72*25.59*5.9inch) |
| Weight   |  | 40kg/88.2lbs                       |
| Ingress protection rating                        |  | IP20                               |
| Operating environment temperature range(°C)      |  | 0~45                               |
| Storage temperature range(°C)                    |  | -15~60                             |
| Relative humidity                                |  | 5% ~ 95%                           |
| Display & Communication interface                |  | LCD+RGB, RS485 / Wifi / CAN        |
| Warranty   |  | 2 years                            |
| Cooling method                                   |  | Smart cooling                      |
| Topology on AC / Battery side                    |  | Transformer-less / Transformer     |
| Altitude (m)                                     |  | <2000                              |
| Noise emission (typical)                         |  | <50dB                              |
| Standard & Certification                         |  |                                    |
| CE   |  |                                    |