



## HIGH FREQUENCY SOLAR INVERTER

# ES-HY2KW-12 Series

Dual output | WIFI

### Smart Power Architecture

- MPPT charge controller with wide PV range
- Solar/utility/battery hybrid supply for continuous power

### Dual Output, Smarter Load Control

- Dual AC outputs for prioritized load management
- Full protection: overload, short-circuit, deep-discharge

### Intelligent Control & Monitoring

- Smart LCD setting (Working modes, Charge Current, Charge Voltage, etc).
- Support RS485,CAN monitoring function

### Flexible, Battery-Optional

- Runs loads even without a battery
- Reliable cold-start capability

### OEM Ready

- Customizable look & color
- Optional complete solar system packages

## ES-HY2KW-12

### TECHNICAL DATA

|                                       |                                                                 |
|---------------------------------------|-----------------------------------------------------------------|
| Nominal Battery System Voltage        | 12VDC                                                           |
| INVERTER OUTPUT                       |                                                                 |
| Dual output                           | yes                                                             |
| Rated Power                           | 2000VA/2000W (Main+Second Load)                                 |
| Battery Mode                          | 2000VA/1600W (Main+Second Load)                                 |
| Surge Power                           | 3200W                                                           |
| Waveform                              | Pure sine wave                                                  |
| AC Voltage Regulation (Batt.Mode)     | 230VAC±5% (Setting)                                             |
| Inverter Efficiency(Peak)             | 90~93%                                                          |
| Transfer Time                         | 10ms (UPS / VDE4105) / 20ms (APL)                               |
| AC INPUT                              |                                                                 |
| Voltage                               | 230VAC±5%                                                       |
| Selectable Voltage Range              | 170~280VAC(UPS) / 90~280VAC(APL) / 184~253VAC(VED4105)          |
| Frequency Range                       | 50Hz / 60Hz(Auto sensing)                                       |
| BATTERY                               |                                                                 |
| Normal voltage                        | 12VDC                                                           |
| Floating Charge Voltage               | 13.7VDC                                                         |
| Overcharge Protection                 | 15VDC                                                           |
| SOLAR CHARGER & AC CHARGER            |                                                                 |
| Maximum PV Array Open Circuit Voltage | 400VDC                                                          |
| Maximum PV Input Current              | 16A                                                             |
| Charging Algorithm                    | 3-Step (Flooded Battery, AGM / GEL / LEAD Battery), 4-Step (Li) |
| Maximum PV Array Power                | 2000W                                                           |
| PV Array MPPT Voltage Range           | 30~320VDC                                                       |
| Maximum Solar Charge Current          | 80A                                                             |
| Maximum AC Charge Current             | 80A                                                             |
| Maximum Charge Current                | 80A                                                             |
| MECHANICAL SPECIFICATIONS             |                                                                 |
| Machine Dimension (W*H*D)(mm)         | 318*369.5*121.3                                                 |
| Package Dimension (W*H*D)(mm)         | 460*205*415                                                     |
| N.W (kg)                              | 6.2                                                             |
| G.W (kg)                              | 7.5                                                             |
| OTHER                                 |                                                                 |
| Humidity                              | 5% to 95% Relative humidity (Non-condensing)                    |
| Operating Temperature                 | -10°C~50°C                                                      |
| Storage Temperature                   | -15°C~60°C                                                      |
| Warranty                              | 2 year                                                          |
| Protection Level                      | IP21                                                            |
| Communication Interface               | WIFI/RS-485                                                     |
| Anti-dust Kit                         | yes                                                             |

### CERTIFICATION & STANDARDS

CE