



# HS2 SERIES

SINGLE PHASE HYBRID ALL-IN-ONE SOLUTION



AC retrofit & easy installation

**16A**

Max 16A input current to better match high power panel



Modular design and expandable up to 20.0kWh

**UPS**

With UPS function switch time  $\leq 10\text{ms}$

**IP65**

IP65 outdoor design

**AFCI**

AFCI integrated(optional)  
RSD supported(optional)



| MODEL                                     | HS2-3K-S2-X  | HS2-3.6K-S2-X | HS2-4K-S2-X | HS2-4.6K-S2-X | HS2-5K-S2-X       | HS2-5K-S2-B-X | HS2-6K-S2-IE-X | HS2-6K-S2-X |
|---|--|---------------|-------------|---------------|-------------------|---------------|----------------|-------------|
| <b>DC Input</b>                           |  |               |             |               |                   |               |                |             |
| Max. PV Array Power [Wp]@ STC             | 4500   | 5400          | 6000        | 6900          | 7500              | 7500          | 9000           | 9000        |
| Max. DC Voltage [V]                       | 550  |               |             |               |                   |               |                |             |
| MPPT Voltage Range [V]                    | 90 ~ 500   |               |             |               |                   |               |                |             |
| Rated DC Voltage [V]                      | 360  |               |             |               |                   |               |                |             |
| Start Voltage [V]                         | 100  |               |             |               |                   |               |                |             |
| Max. DC Input Current [A]                 | 16/16  |               |             |               |                   |               |                |             |
| Max. DC Short Circuit Current [A]         | 19.2/19.2  |               |             |               |                   |               |                |             |
| No. of MPPT                               | 2  |               |             |               |                   |               |                |             |
| <b>Battery Parameters</b>                 |  |               |             |               |                   |               |                |             |
| Battery Type                              | LiFePO4  |               |             |               |                   |               |                |             |
| Battery Voltage Range [V]                 | 85 ~ 450   |               |             |               |                   |               |                |             |
| Max. Charging/ Discharging Current [A]    | 30/30  |               |             |               |                   |               |                |             |
| Scalability                               | BU2-5.0-HV1/5 (up to 4 battery modules)  |               |             |               |                   |               |                |             |
| <b>AC Output [On-grid]</b>                |  |               |             |               |                   |               |                |             |
| Rated AC Power [W]                        | 3000   | 3680          | 4000        | 4600          | 5000              | 5000          | 5500           | 6000        |
| Max. Apparent Power*1 [VA]                | 3300   | 3680          | 4400        | 4600          | 5500              | 5000          | 5500           | 6000        |
| Rated Output Current [A]@ 230Vac          | 13.0   | 16.0          | 17.4        | 20.0          | 21.7 <sup>2</sup> | 21.7          | 25.0           | 26.1        |
| Max. Output Current [A]                   | 15.0   | 16.0          | 20.0        | 20.0          | 25.0              | 22.7          | 25.0           | 27.3        |
| Current Inrush [A]                        | 100.0  |               |             |               |                   |               |                |             |
| Max. AC Fault Current [A]                 | 55.0   |               |             |               |                   |               |                |             |
| Max. AC Over Current Protection [A]       | 55.0   |               |             |               |                   |               |                |             |
| Rated AC Voltage/ Range [V]               | L+N+PE, 220,230,240/180 ~ 280  |               |             |               |                   |               |                |             |
| Rated Output Frequency/ Range [Hz]        | 50,60/45 ~ 55,55 ~ 65  |               |             |               |                   |               |                |             |
| Power Factor [cos φ]                      | 0.8 leading ~ 0.8 lagging  |               |             |               |                   |               |                |             |
| Total Harmonic Distortion [THDi]          | <3%  |               |             |               |                   |               |                |             |
| <b>AC Input [On-grid]</b>                 |  |               |             |               |                   |               |                |             |
| Rated AC Voltage/ Range [V]               | L+N+PE, 220,230,240/180 ~ 280  |               |             |               |                   |               |                |             |
| Rated Input Frequency [Hz]                | 50,60  |               |             |               |                   |               |                |             |
| Max. Input Current [A]@ 230Vac            | 26.1   | 32.0          | 34.8        | 40.0          | 43.5              | 43.5          | 52.2           | 52.2        |
| <b>AC Output [Back-up]</b>                |  |               |             |               |                   |               |                |             |
| Max. Output Power [VA]                    | 3000   | 3680          | 4000        | 4600          | 5000              | 5000          | 5500           | 6000        |
| Max. Output Current [A]                   | 13.6   | 16.7          | 18.2        | 20.9          | 22.7              | 22.7          | 25.0           | 27.3        |
| Peak Output Apparent Power [VA]           | 3600,60s   | 4416,60s      | 4800,60s    | 5520,60s      | 6000,60s          | 6000,60s      | 7200,60s       | 7200,60s    |
| Rated AC Voltage/Range [V]                | L+N+PE, 220,230,240/180 ~ 280  |               |             |               |                   |               |                |             |
| Rated Output Frequency/Range [Hz]         | 50,60/45 ~ 55,55 ~ 65  |               |             |               |                   |               |                |             |
| Output THDv (@ Linear Load)               | <3%  |               |             |               |                   |               |                |             |
| <b>Efficiency</b>                         |  |               |             |               |                   |               |                |             |
| Max. Efficiency                           | 97.6%  |               |             |               |                   |               |                |             |
| Euro Efficiency                           | 97.0%  |               |             |               |                   |               |                |             |
| <b>Protection</b>                         |  |               |             |               |                   |               |                |             |
| Battery Input Reverse Polarity Protection | Integrated   |               |             |               |                   |               |                |             |
| Over load Protection                      | Integrated   |               |             |               |                   |               |                |             |
| AC Short Circuit Current Protection       | Integrated   |               |             |               |                   |               |                |             |
| DC Surge Protection                       | Integrated   |               |             |               |                   |               |                |             |
| AC Surge Protection                       | Integrated   |               |             |               |                   |               |                |             |
| Anti-islanding Protection                 | Integrated   |               |             |               |                   |               |                |             |
| AFCI Protection                           | Optional   |               |             |               |                   |               |                |             |
| RSD Protection                            | Optional   |               |             |               |                   |               |                |             |
| <b>Interface</b>                          |  |               |             |               |                   |               |                |             |
| PV Connection                             | MC4/H4   |               |             |               |                   |               |                |             |
| AC Connection                             | Plug-in connector  |               |             |               |                   |               |                |             |
| Battery Connection                        | Quick connector  |               |             |               |                   |               |                |             |
| Display                                   | LED+APP  |               |             |               |                   |               |                |             |
| Communication                             | Wi-Fi/Ethernet/4G (Optional)   |               |             |               |                   |               |                |             |
| <b>General Parameters</b>                 |  |               |             |               |                   |               |                |             |
| Topology                                  | Non-isolated   |               |             |               |                   |               |                |             |
| Operating Temperature Range               | -10°C to +50°C (>45°C derating)  |               |             |               |                   |               |                |             |
| Cooling Method                            | Natural Convection   |               |             |               |                   |               |                |             |
| Ambient Humidity                          | 0-100% Non-condensing  |               |             |               |                   |               |                |             |
| Altitude                                  | 4000m (>3000m Power Derating)  |               |             |               |                   |               |                |             |
| Noise [dBA]                               | <35  |               |             |               |                   |               |                |             |
| Ingress Protection                        | IP65   |               |             |               |                   |               |                |             |
| Dimensions [H*W*D] [mm]                   | 354*626*365  |               |             |               |                   |               |                |             |
| Weight [kg]                               | 25   |               |             |               |                   |               |                |             |
| Warranty [Year]                           | 5/10/15/20   |               |             |               |                   |               |                |             |
| Standard                                  | EN 62109-1/2, EN 61000-6-2/4, EN 50438, EN 50549, C10/11, IEC 62116, IEC 61727, RD 1699, RD 413, UNE 206006, UNE 206007, NTS, CEI 0-16, CEI O-021, AS 4777.2, NBR 16149, NBR 16150 VDE-AR-N 4105, VDE 0126-1-1 |               |             |               |                   |               |                |             |

Remarks: \*1 According to C10/C11, Max. Apparent Power= Rated AC Power;

\*2 According to VDE-AR-N 4105, Rated AC Current for HS2-5K-S2 is 20A.