



## KE-30KD5H3UN

- The AC-DC matching ratio can reach 2 times
- Supports 150-800V high-voltage batteries
- Supports diesel generator connection
- Up to 10 units parallel operation supported
- MPPT tracking efficiency up to 99%
- AFCI & RSD, Optional
- Ingress Protection(IP)Rating:IP66/TYPE4X



# High-Voltage Three-Phase Hybrid Inverter Technical Parameters

| Model                                                      | KE-30KD5H3UN                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | KE-30KD6H3UN |
|------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| Parallel Operation Mode                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |              |
| Max. Number of Parallel Units (pcs)                        | 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |              |
| AC Input & Output                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |              |
| Rated Input & Output Active Power (W)                      | 30000                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 30000        |
| Rated Input Apparent Power (VA)                            | 33000                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 33000        |
| Rated Input & Output Current (A)                           | 83.4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 36.1         |
| Max. Input & Output Current (A)                            | 90                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 39.7         |
| Max. Bypass Current (Grid to Load) (A)                     | 200                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |
| Peak Power (Off-grid) (A)                                  | 1.6 Times Of Rated Power, 10s                                                                                                                                                                                                                                                                                                                                                                                                                                                       |              |
| TPower Factor Adjustment Range                             | 1(-0.8~0.8)                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |
| Rated Voltage (V)                                          | 208/220/240                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 277/480      |
| Frequency (Hz)                                             | 50/45-55, 60/55-65                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |              |
| Connection Type                                            | 3L+N+PE                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |              |
| Total Voltage Harmonic Distortion (THDv) [%] (Linear Load) | <3% (of nominal power)                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |
| DC Output Current                                          | <0.5% x Rated current                                                                                                                                                                                                                                                                                                                                                                                                                                                               |              |
| Transfer Time                                              | 10ms                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              |
| Battery Parameters                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |              |
| Battery Type                                               | Lithium Iron Phosphate Battery                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              |
| Max. Charge Current (A)                                    | 80*2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              |
| Max. Discharge Current (A)                                 | 80*2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              |
| Charging Voltage Range (V)                                 | 150 ~ 800                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |              |
| Lithium Battery Charging Strategy                          | BMS Adaptive                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |              |
| Battery Input Port                                         | 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |              |
| PV Input                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |              |
| Number of MPPT Trackers                                    | 3/2+2+2                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |              |
| Max. PV Open-Circuit Voltage (V)                           | 1000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              |
| Start-up Voltage (V)                                       | 180                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |
| Rated PV Voltage (V)                                       | 600                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |
| MPPT Voltage Range (V)                                     | 150-850                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |              |
| Max. PV Input Power (W)                                    | 60000                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |              |
| Max. PV Input Current (A)                                  | 40+40+40                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |              |
| Max. PV Short-Circuit Input Current (A)                    | 60+60+60                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |              |
| Efficiency                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |              |
| Max. Efficiency                                            | 97.6%                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |              |
| Euro Efficiency                                            | 96.5%                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |              |
| MPPT Tracking Efficiency                                   | 99%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |
| Device Protection                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |              |
| Integrated Protection                                      | DC Reverse Polarity Protection, AC Output Overload Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short-Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Current Monitoring, Arc Fault Circuit Interrupter (Optional), Power Network Monitoring, Islanding Monitoring, Ground Fault Monitoring, DC Input Switch, DC Terminal Impedance Monitoring, Residual Current Monitoring (RCD) (Optional), Surge Protection |              |
| Surge Protection Level                                     | DC Type II / AC Type III                                                                                                                                                                                                                                                                                                                                                                                                                                                            |              |
| General                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |              |
| Ingress Protection (IP) Rating                             | IP66/TYPE4X                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |
| Operating Temperature Range                                | -40 to +60°C, >45°C Derating                                                                                                                                                                                                                                                                                                                                                                                                                                                        |              |
| Humidity Range                                             | 0-100%                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |
| Noise Level @ 1m                                           | <30dB (A) @ 25°C (77°F)                                                                                                                                                                                                                                                                                                                                                                                                                                                             |              |
| Type of Cooling                                            | Intelligent Air Cooling                                                                                                                                                                                                                                                                                                                                                                                                                                                             |              |
| Dimensions(HxWxD) (mm)                                     | 900 x 528 x 300                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |              |
| Weight (kg)                                                | 82                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |              |
| Operating Altitude(m)                                      | < 2000                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |
| Warranty                                                   | 5 Years/10 Years                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |              |
| Communication                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |              |
| Communication Port                                         | GPRS/Wi-Fi/Bluetooth/4G/LAN(optional)                                                                                                                                                                                                                                                                                                                                                                                                                                               |              |
| Certification                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |              |
| Overview                                                   | UL 1741, CSA, UL991/UL1998, CEC Efficiency, FCC Part 15B                                                                                                                                                                                                                                                                                                                                                                                                                            |              |

