

# BlueKernel Series NEW

Three Phase / On-grid / 125 kW



Max. PV Voltage up to 1100 V  
Type II DC / AC SPD



Compatible for Big Capacity PV Panel  
WiFi / Ethernet Plug Optional



DC / AC Ratio up to 1.5  
IP66 Protection



High Efficiency up to 98.7%  
Smaller and Lighter



| MODEL                               | G125KT7                                                                                                                                                                                                                                               |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Input (DC)</b>                   |                                                                                                                                                                                                                                                       |
| Max. DC Voltage                     | 1100 V                                                                                                                                                                                                                                                |
| Max. Input Current per MPPT         | 45 A                                                                                                                                                                                                                                                  |
| Max. Short-circuit Current per MPPT | 60 A                                                                                                                                                                                                                                                  |
| Start Voltage                       | 300 V                                                                                                                                                                                                                                                 |
| MPPT Voltage Range                  | 200 ~ 1000 V                                                                                                                                                                                                                                          |
| Nominal Voltage                     | 650 V                                                                                                                                                                                                                                                 |
| Number of MPPT                      | 8                                                                                                                                                                                                                                                     |
| Strings per MPPT                    | 2                                                                                                                                                                                                                                                     |
| <b>Output (AC)</b>                  |                                                                                                                                                                                                                                                       |
| Nominal AC Output Power             | 125 kW                                                                                                                                                                                                                                                |
| Max. AC Apparent Power              | 125 kVA                                                                                                                                                                                                                                               |
| Nominal AC Voltage                  | 230 / 400 V, 3W + PE, 3W+N+PE                                                                                                                                                                                                                         |
| AC Grid Frequency Range             | 50 Hz / 60 Hz (±5 Hz)                                                                                                                                                                                                                                 |
| Max. Output Current                 | 181.2 A                                                                                                                                                                                                                                               |
| Power Factor (cosΦ)                 | -0.8 (Lagging) ~ 0.8 (Leading)                                                                                                                                                                                                                        |
| THDi                                | < 3% (Nominal Power)                                                                                                                                                                                                                                  |
| <b>Efficiency</b>                   |                                                                                                                                                                                                                                                       |
| Max. Efficiency                     | 98.7%                                                                                                                                                                                                                                                 |
| Euro Efficiency                     | 98.5%                                                                                                                                                                                                                                                 |
| <b>Protection Devices</b>           |                                                                                                                                                                                                                                                       |
| DC Switch                           | Yes                                                                                                                                                                                                                                                   |
| Anti-islanding Protection           | Yes                                                                                                                                                                                                                                                   |
| Output Over Current Protection      | Yes                                                                                                                                                                                                                                                   |
| DC Reverse Polarity Protection      | Yes                                                                                                                                                                                                                                                   |
| String Fault Detection              | Optional                                                                                                                                                                                                                                              |
| DC / AC Surge Protection            | DC Type II; AC Type II                                                                                                                                                                                                                                |
| AC Short Circuit Protection         | Yes                                                                                                                                                                                                                                                   |
| AFCI Function                       | Optional                                                                                                                                                                                                                                              |
| Night SVG Function                  | Optional                                                                                                                                                                                                                                              |
| PID Recovery                        | Optional                                                                                                                                                                                                                                              |
| Insulation Detection                | Yes                                                                                                                                                                                                                                                   |
| Residual Current Monitoring         | Yes                                                                                                                                                                                                                                                   |
| <b>General Specifications</b>       |                                                                                                                                                                                                                                                       |
| Dimensions (W x H x D)              | 965 x 700 x 355 mm                                                                                                                                                                                                                                    |
| Weight                              | 85 kg                                                                                                                                                                                                                                                 |
| Operating Temperature Range         | -30 ~ 60°C                                                                                                                                                                                                                                            |
| Cooling Type                        | Fan Cooling                                                                                                                                                                                                                                           |
| Max. Operation Altitude             | 5000 m (> 4000 m Derating)                                                                                                                                                                                                                            |
| Max. Operating Humidity             | 0 ~ 100%                                                                                                                                                                                                                                              |
| IP Class                            | IP66                                                                                                                                                                                                                                                  |
| Noise (dB)                          | ≤ 80 dB                                                                                                                                                                                                                                               |
| Topology                            | Transformerless                                                                                                                                                                                                                                       |
| Communication                       | RS-485 / PLC / WIFI / Ethernet                                                                                                                                                                                                                        |
| Display                             | LED, Bluetooth + APP                                                                                                                                                                                                                                  |
| Certification & Standard            | IEC 62109-1/-2; EN IEC 61000-6-1/2/3/4; EN IEC 61000-3-11/12; EN IEC 62920; IEC 61727; IEC 62116; IEC 61683; IEC 60068-2-1/2/14/30; EU RoHS Directive; EN 50549-1/2; EN 50549-10; CEI 0-16; NC RFG; C10/11; UNE 217001; UNE 217002; NTS V2.1; PEA/MEA |