

# Power-Box SL3/3.68/4.6/5/6K

## Single Phase Hybrid Inverter



### KEY FEATURES



#### Flexible

- 16 A max. PV input current
- 150% PV input oversizing
- Support RCD loads



#### Safe & Reliable

- IP66 protection
- SPD Type II
- Support AFCI (optional)



#### Powerful

- Backup switch time < 10 ms
- Up to 150% peak output power
- Parallel connection (3 max)



#### Smart & Easy

- Firmware OTA updates
- 24 / 7 online monitoring
- Quick commissioning via BLE



# TECHNICAL PARAMETERS

| Models                                | Power-Box SL3K                                            | Power-Box SL3.68K | Power-Box SL4.6K | Power-Box SL5K  | Power-Box SL6K  |
|---------------------------------------|-----------------------------------------------------------|-------------------|------------------|-----------------|-----------------|
| Input (PV)                            |                                                           |                   |                  |                 |                 |
| Max. PV Input Power                   | 4500 Wp                                                   | 5400 Wp           | 6900 Wp          | 7500 Wp         | 9000 Wp         |
| Max. PV Input Voltage                 |                                                           |                   | 600 V            |                 |                 |
| Start-up Voltage                      |                                                           |                   | 100 V            |                 |                 |
| MPPT Voltage Range                    |                                                           |                   | 100 ~ 550 V      |                 |                 |
| Max. Current per MPPT                 |                                                           |                   | 16 A             |                 |                 |
| Max. Short Circuit Current per MPPT   |                                                           |                   | 20 A             |                 |                 |
| Number of MPP Trackers                |                                                           |                   | 2                |                 |                 |
| Number of Strings per MPPT            |                                                           |                   | 1/1              |                 |                 |
| Battery                               |                                                           |                   |                  |                 |                 |
| Compatible Battery                    | BYD Battery-Box LV 5.0+                                   |                   |                  |                 |                 |
| Battery Voltage                       | 40 ~ 57.6 V                                               |                   |                  |                 |                 |
| Max. Charge / Discharge Current       | 100 A                                                     |                   |                  |                 |                 |
| Max. Charge / Discharge Power         | 5120 W / 3000 W                                           | 5120 W / 3680 W   | 5120 W / 4600 W  | 5120 W / 5000 W | 5120 W / 5000 W |
| AC Input / Output (Grid)              |                                                           |                   |                  |                 |                 |
| Rated AC Input / Output Power         | 3000 W                                                    | 3680 W            | 4600 W           | 5000 W          | 6000 W          |
| Max. AC Input / Output Apparent Power | 3300 VA                                                   | 3680 VA           | 4600 VA          | 5500 VA         | 6000 VA         |
| Rated AC Input / Output Current       | 13 A                                                      | 16 A              | 20 A             | 21.7 A          | 26.1 A          |
| Max. AC Input / Output Current        | 21.8 A / 15 A                                             | 26.7 A / 16 A     | 33.5 A / 20.9 A  | 33.8 A / 25 A   | 43.6 A / 27.3 A |
| Rated AC Voltage                      | 1 / N / PE, 230 V                                         |                   |                  |                 |                 |
| AC Voltage Range                      | 0.9 Ur ~ 1.1 Ur                                           |                   |                  |                 |                 |
| AC Grid Frequency                     | 50 Hz (45 Hz ~ 54 Hz) / 60 Hz (55 Hz ~ 65 Hz)             |                   |                  |                 |                 |
| Power Factor                          | 0.99, 0.8 leading ~ 0.8 lagging adjustable                |                   |                  |                 |                 |
| THDi                                  | < 3%                                                      |                   |                  |                 |                 |
| AC Output (Backup)                    |                                                           |                   |                  |                 |                 |
| Rated AC Output Power                 | 3000 W                                                    | 3680 W            | 4600 W           | 5000 W          | 6000 W          |
| Max. AC Output Apparent Power         | 4500 VA, 10 s                                             | 5400 VA, 10 s     | 6900 VA, 10 s    | 7500 VA, 10 s   | 7500 VA, 10 s   |
| Back-up Switch Time                   | < 10 ms                                                   | < 10 ms           | < 10 ms          | < 10 ms         | < 10 ms         |
| Max. AC Output Current                | 13 A                                                      | 16 A              | 20 A             | 21.7 A          | 26.1 A          |
| Rated Output Voltage                  | 1 / N / PE, 230 V                                         |                   |                  |                 |                 |
| Rated Output Grid Frequency           | 50 Hz / 60 Hz                                             |                   |                  |                 |                 |
| THDv                                  | < 3%                                                      |                   |                  |                 |                 |
| Efficiency                            |                                                           |                   |                  |                 |                 |
| MPPT Efficiency                       | 99.9%                                                     |                   |                  |                 |                 |
| Max. Efficiency                       | 97.3%                                                     |                   |                  |                 |                 |
| EU Efficiency                         | 96.3%                                                     |                   |                  |                 |                 |
| Protection                            |                                                           |                   |                  |                 |                 |
| Protection Class                      | I                                                         |                   |                  |                 |                 |
| Anti-islanding Protection             | Yes                                                       |                   |                  |                 |                 |
| DC Reverse Polarity Protection        | Yes                                                       |                   |                  |                 |                 |
| Insulation Monitoring                 | Yes                                                       |                   |                  |                 |                 |
| DC Surge Protection                   | Yes                                                       |                   |                  |                 |                 |
| AC Surge Protection                   | Yes                                                       |                   |                  |                 |                 |
| Residual Current Monitoring           | Yes                                                       |                   |                  |                 |                 |
| AC Overcurrent Protection             | Yes                                                       |                   |                  |                 |                 |
| AC Short-circuit Protection           | Yes                                                       |                   |                  |                 |                 |
| Over Voltage Category                 | DC: II AC: III                                            |                   |                  |                 |                 |
| Over-heat Protection                  | Yes                                                       |                   |                  |                 |                 |
| AFCI                                  | Yes (Optional)                                            |                   |                  |                 |                 |
| General Data                          |                                                           |                   |                  |                 |                 |
| Operating Temperature Range           | -30 °C ~ +60 °C, > 45 °C Derating                         |                   |                  |                 |                 |
| Relative Operating Humidity           | 0 ~ 95 %RH, Non-Condensing                                |                   |                  |                 |                 |
| Operating Altitude                    | 4000 m, > 2000 m Derating                                 |                   |                  |                 |                 |
| Cooling                               | Natural Convection                                        |                   |                  |                 |                 |
| Noise                                 | < 35 dB                                                   |                   |                  |                 |                 |
| Dimensions                            | 481 mm * 390 mm * 200 mm                                  |                   |                  |                 |                 |
| Weight                                | 21.35 kg                                                  |                   |                  |                 |                 |
| Inverter Topology                     | High-frequency Isolation                                  |                   |                  |                 |                 |
| Display                               | LED                                                       |                   |                  |                 |                 |
| Max. Parallel Quantity                | 3                                                         |                   |                  |                 |                 |
| Communication                         | RS485, CAN, WiFi, LAN, Bluetooth                          |                   |                  |                 |                 |
| Ingress Protection                    | IP66                                                      |                   |                  |                 |                 |
| Nighttime Power                       | ≤ 10 W                                                    |                   |                  |                 |                 |
| Standards Compliance                  |                                                           |                   |                  |                 |                 |
| Safety / EMC Standard                 | IEC / EN 62109-1 / -2, EN 61000-6-1 / -3                  |                   |                  |                 |                 |
| Grid Connection Standard              | G98 or G99, EN 50549-1, NRS 097-2-1, IEC 62116, IEC 61727 |                   |                  |                 |                 |