

## Battery

## BW-BAT-10.1P

### Electrical

|                          |             |
|--------------------------|-------------|
| Battery Capacity         | 10.1kWh     |
| Usable Capacity          | 9.7kWh      |
| Depth of Discharge (DoD) | 96%         |
| Nominal Voltage          | 96V         |
| Operating Voltage Range  | 91.5~106.5V |
| Internal Resistance      | <30 mΩ      |
| Cycle Lifetime           | 8000        |

### Operation

|                             |                       |
|-----------------------------|-----------------------|
| Max. Charging Current       | 52.5A                 |
| Max. Discharging Current    | 52.5A                 |
| Operating Temperature Range | -10~50°C              |
| Relative Humidity           | 0~95% (No Condensing) |

### Physical

|                    |                                                         |
|--------------------|---------------------------------------------------------|
| Battery Type       | LFP                                                     |
| Weight             | 95kg                                                    |
| Dimensions (W*H*D) | 610x690x200 mm                                          |
| Protection Degree  | IP65                                                    |
| Warranty           | 5 years product warranty, 10 years performance warranty |

### BMS

|                 |                                             |
|-----------------|---------------------------------------------|
| Modules         | 1~6 in parallel                             |
| Capacity        | 10.1 / 20.2 / 30.2 / 40.3 / 50.4 / 60.5 kWh |
| Usable Capacity | 9.7 / 19.4 / 29.0 / 38.7 / 48.4 / 58.1 kWh  |
| Communication   | CAN / RS-485 (Optional) 90%                 |

### Certificate

|                   |                                                        |
|-------------------|--------------------------------------------------------|
| Transportation    | UN38.3                                                 |
| Safety Regulation | IEC 62619 (Cell and Pack)                              |
| EMC               | EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4 |

Note: Specifications are subject to change without advance notice.

| Inverter Model                                                     | BW-INV-SPH3.6K                                                       | BW-INV-SPB5K                  | BW-INV-SPH5K    |
|--------------------------------------------------------------------|----------------------------------------------------------------------|-------------------------------|-----------------|
| Battery Input                                                      |                                                                      | Li-Ion / Lead-acid            |                 |
| Nominal Battery Voltage                                            |                                                                      | 96V                           |                 |
| Battery Voltage Range                                              |                                                                      | 75~400V                       |                 |
| Max. Charging Current                                              | 45A                                                                  | 65A                           | 65A             |
| Max. Discharging Current                                           | 45A                                                                  | 65A                           | 65A             |
| PV Input                                                           |                                                                      |                               |                 |
| Max. PV Input Power                                                | 7.36kW                                                               | -                             | 10kW            |
| Max. PV Input Voltage                                              | 580V                                                                 | -                             | 580V            |
| MPPT Range                                                         | 100~550V                                                             | -                             | 100~550V        |
| Full Load MPPT Range                                               | 125~550V                                                             | -                             | 180~550V        |
| Startup Voltage                                                    | 100V                                                                 | -                             | 100V            |
| Max. Input Current                                                 | 15A/15A                                                              | -                             | 15A/15A         |
| Max. Short Circuit Current                                         | 18.75A/18.75A                                                        | -                             | 18.75A/18.75A   |
| Grid Port                                                          |                                                                      |                               |                 |
| Rated Output Power                                                 | 3.68kVA                                                              | 5kVA/4.6kVA(DE)               | 5kVA/4.6kVA(DE) |
| Max. Input Power                                                   | 7.36kVA                                                              | 10kVA                         | 10kVA           |
| Rated Grid Voltage                                                 |                                                                      | 230Vac                        |                 |
| Grid Voltage Range                                                 |                                                                      | 180~270Vac                    |                 |
| Rated Grid Frequency                                               |                                                                      | 50/60Hz                       |                 |
| Power Factor                                                       |                                                                      | -0.8~+0.8                     |                 |
| THDi                                                               |                                                                      | <3%                           |                 |
| Backup Port                                                        |                                                                      |                               |                 |
| Max. Backup Power                                                  | 7.36kVA/7.36kW                                                       | 10kVA/10kW                    | 10kVA/10kW      |
| Rated Backup Voltage                                               |                                                                      | 230Vac                        |                 |
| Rated Backup Frequency                                             |                                                                      | 50/60Hz                       |                 |
| THDv                                                               | <3% (Linear Load) / <5% (Non-linear Load)                            |                               |                 |
| DCV                                                                |                                                                      | <100mV                        |                 |
| Crest Ratio                                                        |                                                                      | 3:1                           |                 |
| Transfer Time                                                      |                                                                      | <10ms                         |                 |
| Efficiency                                                         |                                                                      |                               |                 |
| Max. Efficiency                                                    | 97.3%                                                                | -                             | 97.3%           |
| Europe Efficiency                                                  | 96.2%                                                                | -                             | 96.2%           |
| MPPT Efficiency                                                    | 99.9%                                                                | -                             | 99.9%           |
| Round Trip Efficiency                                              | 90%                                                                  | 90%                           | 90%             |
| System                                                             |                                                                      |                               |                 |
| Operating Temperature Range                                        |                                                                      | -20~60℃                       |                 |
| Relative Humidity                                                  |                                                                      | 0~95% (No Condensing)         |                 |
| Operating Altitude                                                 |                                                                      | ≤4000m                        |                 |
| Cooling                                                            |                                                                      | Nature Convection             |                 |
| Noise                                                              |                                                                      | <30dB                         |                 |
| Topology                                                           |                                                                      | Transformerless               |                 |
| Dimensions (W*H*D)                                                 |                                                                      | 610x370x200 mm                |                 |
| Protection Degree                                                  |                                                                      | IP65                          |                 |
| Weight                                                             | 18kg                                                                 | 18kg                          | 19.5kg          |
| Warranty                                                           |                                                                      | 5 years / 10 years (optional) |                 |
| HMI & Comm.                                                        |                                                                      |                               |                 |
| Communication with BMS                                             |                                                                      | CAN / RS-485                  |                 |
| Load Monitoring                                                    |                                                                      | Meter / CT / Backup box       |                 |
| External Communication                                             |                                                                      | RS-485 / WIFI / 4G / Ethernet |                 |
| User Interface                                                     |                                                                      | LED / LCD                     |                 |
| Certificate                                                        |                                                                      |                               |                 |
| Grid Regulation                                                    | CEI 0-21, VDE 4105-AR-N, VDE 0126-1-1, EN 50438, G99, G100, AS4777.2 |                               |                 |
|                                                                    | NRS 097, EN 50549, C10/C11, UNE, UTE, NCRfG/PTPIREE                  |                               |                 |
| Safety Regulation                                                  | IEC 62109-1&2; IEC 62477                                             |                               |                 |
| EMC EN 61000-6-1,                                                  | EN 61000-6-2, EN 61000-6-3, EN 61000-6-4                             |                               |                 |
| Note: Specifications are subject to change without advance notice. |                                                                      |                               |                 |