



## PULSE S3

Off-Grid Hybrid Inverter

### Features >>

- IP66 protection rating
- 1.7 times the maximum MPPT input power; under specific conditions, supports up to 2 times the PV input power.
- Maximum MPPT input current of 28A, supporting multiple strings of photovoltaic panels connected in parallel.
- Dual AC outputs with intelligent load management.
- Supports battery-free operation mode.
- Maximum discharge design of 135A.
- Supports parallel connection of up to 6 single-phase inverters or 9 three-phase inverters in a grid configuration.
- Both AC and PV inputs can activate the lithium battery.
- Wide grid voltage adaptation range of 90-280Vac.
- 1.5 times grid input over-provisioning technology.
- Minimum MPPT operating voltage of 60Vdc.
- Comprehensive hardware protection.
- 5-year warranty / 10-year service (optional).



## PULSE S3 Product Specifications

| Model                                   | 4kW                                                                                                                                                                                                                                                                                                      | 6kW       |
|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| Battery Data                            |                                                                                                                                                                                                                                                                                                          |           |
| Battery Type                            | Lithium-ion & Lead-acid                                                                                                                                                                                                                                                                                  |           |
| Rated Battery Voltage (Vdc)             | 48                                                                                                                                                                                                                                                                                                       |           |
| Battery Voltage Range (Vdc)             | 40~60                                                                                                                                                                                                                                                                                                    |           |
| Max. Charge/Discharge Current (A)       | 80 / 100                                                                                                                                                                                                                                                                                                 | 125 / 135 |
| Forced Wake-up by PV                    | YES                                                                                                                                                                                                                                                                                                      |           |
| PV Input                                |                                                                                                                                                                                                                                                                                                          |           |
| Max. PV Access Power (W)                | 8000                                                                                                                                                                                                                                                                                                     | 12000     |
| Max. MPPT Input Power (W)               | 6800                                                                                                                                                                                                                                                                                                     | 10200     |
| Max. Input Voltage (Vdc)                | 500                                                                                                                                                                                                                                                                                                      |           |
| Rated Input Voltage (Vdc)               | 370                                                                                                                                                                                                                                                                                                      |           |
| MPPT Voltage Range (Vdc)                | 60~450                                                                                                                                                                                                                                                                                                   |           |
| No. Of MPPT/ Strings Per MPPT           | 1/2                                                                                                                                                                                                                                                                                                      |           |
| Max Input Current Per MPPT (A)          | 28                                                                                                                                                                                                                                                                                                       |           |
| Max. Short Circuit Current Per MPPT (A) | 35A                                                                                                                                                                                                                                                                                                      |           |
| Grid Input                              |                                                                                                                                                                                                                                                                                                          |           |
| Rated Grid Voltage (Vac)                | 220/230/240±5%                                                                                                                                                                                                                                                                                           |           |
| Voltage Input Range (Vac)               | 90~280                                                                                                                                                                                                                                                                                                   |           |
| Rated Grid Frequency (Hz)               | 50 / 60                                                                                                                                                                                                                                                                                                  |           |
| Max Input Current (A)                   | 26                                                                                                                                                                                                                                                                                                       | 40        |
| Total Harmonic Distortion (THDi)        | <3% (of nominal power)                                                                                                                                                                                                                                                                                   |           |
| Backup Data                             |                                                                                                                                                                                                                                                                                                          |           |
| Rated Output Power (W)                  | 4000                                                                                                                                                                                                                                                                                                     | 6000      |
| Rated Output Current (A)                | 18                                                                                                                                                                                                                                                                                                       | 27        |
| Rated Output Frequency (Hz)             | 50/60±0.1%                                                                                                                                                                                                                                                                                               |           |
| Overload Capability                     | 1min@101~110%;10s@110% ~ 150%;5s@150% ~ 200%;100ms@ > 200%                                                                                                                                                                                                                                               |           |
| Switch Time (ms)                        | 10ms for Computer Equipment,20ms for Household Equipment                                                                                                                                                                                                                                                 |           |
| Total Harmonic Distortion (THDv)        | <3%                                                                                                                                                                                                                                                                                                      |           |
| Efficiency                              |                                                                                                                                                                                                                                                                                                          |           |
| Max. Efficiency                         | 97.0%                                                                                                                                                                                                                                                                                                    |           |
| MPPT Tracking Efficiency                | 99.9%                                                                                                                                                                                                                                                                                                    |           |
| Protection                              |                                                                                                                                                                                                                                                                                                          |           |
| Integrated                              | DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Power Network Monitoring, Earth Fault Detection,Surge protection level |           |
| Surge Protection                        | TYPE II(DC), TYPE II(AC)                                                                                                                                                                                                                                                                                 |           |
| Over Voltage Category                   | OVC II (DC), OVC III (AC)                                                                                                                                                                                                                                                                                |           |
| General Data                            |                                                                                                                                                                                                                                                                                                          |           |
| Operating Temperature (°C)              | -40~+60 (Above 45°C Derating)                                                                                                                                                                                                                                                                            |           |
| Dimensions [W*H*D] (mm)                 | 395*485*156                                                                                                                                                                                                                                                                                              |           |
| Weight (kg)                             | 14.5                                                                                                                                                                                                                                                                                                     |           |
| Inverter Topology                       | Non-Isolated                                                                                                                                                                                                                                                                                             |           |
| Cooling                                 | Smart cooling                                                                                                                                                                                                                                                                                            |           |
| Altitude (m)                            | ≤3000                                                                                                                                                                                                                                                                                                    |           |
| Protection Level                        | IP66                                                                                                                                                                                                                                                                                                     |           |
| Communication                           | RS232 / RS485 / CAN / Dry contact/ External battery NTC/ Parallel communication/WIFI(optional)                                                                                                                                                                                                           |           |
| Warranty                                | 5 Years                                                                                                                                                                                                                                                                                                  |           |
| Standard                                |                                                                                                                                                                                                                                                                                                          |           |
| Safety Standards                        | IEC 62109-1:2010, EN 62109-1:2010, IEC 62109-2:2011, EN 62109-2:2011                                                                                                                                                                                                                                     |           |
| EMC Standards                           | EN IEC 61000-6-1:2019;EN IEC 61000-6-3:2021;EN IEC 61000-3-11:2019;EN61000-3-12:2011                                                                                                                                                                                                                     |           |
| Efficiency Standard                     | IEC 61683:1999                                                                                                                                                                                                                                                                                           |           |