



FYSOLAR residential Energy Storage inverters

## Single-phase ESS hybrid inverter

### Product features:

#### Safe & reliable

- Passed IEC/EN62109-1/-2, IEC/EN62477-1, South Africa NRS097-2-1:2017, IEC/EN 61000-6-1, IEC/EN 61000-6-3 test certification;

#### Friendly & flexible

- Support multi-parallel connection;
- Support flexible access of diesel generator;
- Compatible with lead-acid and lithium-ion battery;

#### Economical & practica

- Support intelligent EMS management function;
- Support on/off-grid automatic switching function to ensure uninterrupted power when important loads are off-grid;



## Technical specification:

| Technical specification             | FYR3KL1 | FYR3K6L1 | FYR4KL1 | FYR4K6L1                                 | FYR5KL1  | FYR6KL1 |
|-------------------------------------|---------|----------|---------|------------------------------------------|----------|---------|
| <b>Input (PV)</b>                   |         |          |         |                                          |          |         |
| Max. power(kW)                      | 4.6     | 4.6      | 6       | 6                                        | 7        | 7       |
| Max. DC voltage(V)                  |         |          |         | 550                                      |          |         |
| MPPT voltage range(V)               |         |          |         | 125~500                                  |          |         |
| Max.input current of single MPPT(A) |         |          |         | 14                                       |          |         |
| MPPT tracker/strings                |         |          |         | 2/1                                      |          |         |
| <b>AC output</b>                    |         |          |         |                                          |          |         |
| Rated output power(kVA)             | 3       | 3.68     | 4       | 4.6                                      | 5        | 6       |
| Max. output current(A)              | 13      | 16       | 17.4    | 20                                       | 21.7     | 26      |
| Grid voltage/range(V)               |         |          |         | 230/176~270                              |          |         |
| Frequency (Hz)                      |         |          |         | 50 /60                                   |          |         |
| PF                                  |         |          |         | 0.8lagging-0.8leading                    |          |         |
| THDi                                |         |          |         | <3%                                      |          |         |
| AC output topology                  |         |          |         | L+N+PE                                   |          |         |
| <b>Battery</b>                      |         |          |         |                                          |          |         |
| Battery voltage range(V)            |         |          |         | 40~58                                    |          |         |
| Max. charging voltage(V)            |         |          |         | 58                                       |          |         |
| Max. charge/discharge current(A)    | 95/62.2 | 95/75    | 95/83.3 | 95/95.8                                  | 95/104.2 | 95/110  |
| Battery type                        |         |          |         | lithium /Lead-acid                       |          |         |
| Communication interface             |         |          |         | CAN/RS485                                |          |         |
| <b>EPS output</b>                   |         |          |         |                                          |          |         |
| Rated power (kVA)                   | 3       | 3.68     | 4       | 4.6                                      | 5        | 6       |
| Rated output voltage(V)             |         |          |         | 230                                      |          |         |
| Rated output current(A)             | 13      | 16       | 17.4    | 20                                       | 21.7     | 26      |
| Rated frequency (Hz)                |         |          |         | 50 /60                                   |          |         |
| Automatic switching time (ms)       |         |          |         | <20                                      |          |         |
| THDu                                |         |          |         | <2%                                      |          |         |
| Overload capacity                   |         |          |         | 110%, 30S/120%, 10S/150%, 0.02S          |          |         |
| <b>General data</b>                 |         |          |         |                                          |          |         |
| Battery chage/discharge efficiency  |         |          |         | 95.0%                                    |          |         |
| DC Max. efficiency                  |         |          |         | 97.6%                                    |          |         |
| Europe efficiency                   |         |          |         | 97.0%                                    |          |         |
| MPPT efficiency                     |         |          |         | 99.9%                                    |          |         |
| Ingress protection                  |         |          |         | IP65                                     |          |         |
| Noise emission (dB)                 |         |          |         | <35                                      |          |         |
| Operation temperature               |         |          |         | - 25℃ ~ 60℃                              |          |         |
| Cooling                             |         |          |         | Natural                                  |          |         |
| Relative humidity                   |         |          |         | 0 ~95% (non-condensing)                  |          |         |
| Altitude                            |         |          |         | 2,000m(>2,000 Derating)                  |          |         |
| DimensionsW *D *H(mm)               |         |          |         | 550*200*515                              |          |         |
| Weight (kg)                         |         |          |         | 25                                       |          |         |
| Isolation transformer               |         |          |         | No                                       |          |         |
| Self-consumption(W)                 |         |          |         | <3                                       |          |         |
| <b>Display and communication</b>    |         |          |         |                                          |          |         |
| Display                             |         |          |         | LCD                                      |          |         |
| Interface:RS485/Wifi/4G/<br>CAN/DRM |         |          |         | Yes/Opt/Opt/Yes/Yes                      |          |         |
| Safety standard                     |         |          |         | IEC/EN62109-1/-2, IEC/EN62477-1          |          |         |
| EMC                                 |         |          |         | IEC/EN 61000-6-1, IEC/EN 61000-6-3       |          |         |
| On-grid                             |         |          |         | South Africa NRS097-2-1:2017, UK G98,G99 |          |         |