## **Low Frequency Off-grid Inverter PRO Series**

SIF-PRO-1~12KW













ADVANTAGES-FEATURES



Pure Sine Wave Output, Adaptable to Different Loads



Stable Output Voltage and Save Power



MPPT Efficiency > 98%, AC Charging Efficiency > 98%



UPS Transfer Time < 20ms



Load Peak Ratio = 3:1, Strong Loading Capacity



Pure Copper Transformer, 8 years Lifespan



Configurable Grid/Solar Input Priority



Slight No-load Loss



## **Technical Data**

| Model                                | SIF-PRO-<br>1KW   | SIF-PRO-<br>2KW | SIF-PRO-<br>3KW          | SIF-PRO-<br>4KW | SIF-PRO-<br>5KW | SIF-PRO-<br>6KW                                 | SIF-PRO-<br>8KW | SIF-PRO-<br>10KW   | SIF-PRO<br>12KW |
|--------------------------------------|---|-----------------|--------------------------|-----------------|-----------------|---|-----------------|--|-----------------|
| Input Data                           |   | MP.             |                          |                 |                 | . N   |                 |  |                 |
| Rated Charge Current                 | 60A   |                 |                          |                 |                 |   |                 |  |                 |
| Charger Mode                         | MPPT  |                 |                          |                 |                 |   |                 |  |                 |
| PV Input Voltage Range               | 30~55VDC (For 24V Battery) / 60~145VDC (For 48V Battery)  |                 |                          |                 |                 |   |                 |  |                 |
| MAX PV Open Circuit<br>Array Voltage | 55VDC (For 24V Battery) / 110VDC (For 48V Battery)  |                 |                          |                 |                 |   |                 |  |                 |
| Output Data                          |   |                 |                          |                 |                 |   |                 |  |                 |
| Rated Power                          | 1KW   | 2KW             | 3KW                      | 4KW             | 5KW             | 6KW   | 8KW             | 10KW   | 12KW            |
| AC Voltage                           |   |                 |                          |                 | 230VAC          |   |                 |  |                 |
| Nominal Input Voltage                | 120VAC / 230VAC 230VAC  |                 |                          |                 |                 |   |                 |  |                 |
| Low Line Disconnect                  | 85VAC±4% (Normal) / 80VAC±4% (Wide) for 120V<br>184VAC±4% (Normal) / 135VAC±4% (Wide) for 230V  |                 |                          |                 |                 | 184VAC±4% (Normal)<br>135VAC±4% (Wide) for 230V |                 |  |                 |
| Low Line Re-connect                  | 95VAC±4% (Normal) / 85VAC±4% (Wide) for 120V<br>194VAC±4% (Normal) / 145VAC±4% (Wide) for 230V  |                 |                          |                 |                 | 194VAC±4% (Normal)<br>145VAC±4% (Wide) for 230V |                 |  |                 |
| High Line Disconnect                 | 136VAC±4% (Normal) / 140VAC±4% (Wide) for 120V<br>263VAC±4% (Normal) / 263VAC±4% (Wide) for 230V  |                 |                          |                 |                 | 263VAC±4% (Normal)<br>263VAC±4% (Wide) for 230V |                 |  |                 |
| MAX AC Input Voltage                 | MAX 150V ( 120VAC) / MAX 270V (230VAC) MAX 270V   |                 |                          |                 |                 |   |                 |  |                 |
| Nominal Input Frequency              | 50Hz (Range: 41~54Hz) / 60Hz (Range: 51~64Hz)   |                 |                          |                 |                 |   |                 |  |                 |
| Power Factor                         | 0.9~1.0   |                 |                          |                 |                 |   |                 |  |                 |
| Nominal Output Voltage               | LV: 120VAC ± 10% rms / HV: 230VAC ± 10% rms   |                 |                          |                 |                 |   |                 |  |                 |
| Nominal Output Frequency             | 50Hz ± 0.3Hz / 60Hz ± 0.3Hz   |                 |                          |                 |                 |   |                 |  |                 |
| Battery Data                         |   |                 |                          | 30112 2         | 0.5112 / 001    | 12 2 0.5112                                     |                 |  |                 |
| Nominal DC Input Voltage             |   |                 |                          |                 | 24\/DC / 49\    | /DC   |                 |  |                 |
| Low Battery Alarm                    | 24VDC / 48VDC   |                 |                          |                 |                 |   |                 |  |                 |
| Low DC Input Shut-down               | 21VDC±0.6VDC for 24VDC / 42VDC±1.2VDC for 48VDC 20VDC±0.6VDC for 24VDC / 40VDC±1.2VDC for 48VDC   |                 |                          |                 |                 |   |                 |  |                 |
| High DC Input Alarm & Fault          | 32VDC±0.6VDC for 24VDC / 40VDC±1.2VDC for 48VDC   |                 |                          |                 |                 |   |                 |  |                 |
| Efficiency                           |   |                 | JEVDCI                   | 0.000           | 24 V D C / 04 V | DCI1.2VD  | C 101 40VDC     | Alexander de la companya de la compa |                 |
| Mppt Efficiency                      |   |                 |                          |                 | ≥99%            |   |                 |  |                 |
| Efficiency<br>(Battery Mode)         | ≥99%  |                 |                          |                 |                 |   |                 |  |                 |
| Efficiency<br>(Line Mode)            | ≥98%  |                 |                          |                 |                 |   |                 |  |                 |
| System Parameter                     |   |                 |                          |                 |                 |   |                 |  |                 |
| Transfer Time                        | AC to DC 20ms (MAX) / DC to AC 15ms (MAX)   |                 |                          |                 |                 |   |                 |  |                 |
| Overload Protection                  | 110% <load<150%, &="" 0.5s="" 1s="" 60s="" after="" beeps="" every="" fault="" load="" off="" output="" the="">150%, beeps 0.5s every 1s &amp; fault after 20s</load<150%,> |                 |                          |                 |                 |   |                 |  |                 |
| Surge Rating (10s)                   | 3:1 (VA)  |                 |                          |                 |                 |   |                 |  |                 |
| Power Saver                          | Load≤25W (Enabled on "P/S auto" Setting of Remote Control)  |                 |                          |                 |                 |   |                 |  |                 |
| General Data                         |   |                 | 544 <u>2</u> 2 2 7 VV (1 | LITADICA OII    | , /5 auto 3     | cating of K                                     | cinote cont     | 101)   |                 |
| Protections                          |   |                 | Low batt                 | en Over al      | arge Over       | load Over                                       | temperatur      |  |                 |
| Indicators                           | Low battery, Over charge, Over load, Over temperature  LED+LCD Display  |                 |                          |                 |                 |   |                 |  |                 |
|                                      | 0°C~40°C  |                 |                          |                 |                 |   |                 |  |                 |
| Operating Temperature Range          |   |                 |                          |                 |                 |   |                 |  |                 |
| Storage Temperature                  | -15°C~60°C  |                 |                          |                 |                 |   |                 |  |                 |
| Operating Humidity                   | 5%~95% (Non-condensing)   |                 |                          |                 |                 |   |                 |  |                 |
| Noise                                | ≤60dB   |                 |                          |                 |                 |   |                 |  |                 |
| Cooling                              | Forced Air, Variable Speed Fan  |                 |                          |                 |                 |   |                 |  |                 |
| Dimensions (W*D*H)                   |   | )*336*480mi     |                          |                 | 00*400*530m     |   |                 | 204*416*627r   |                 |
| Net Weight                           | 19.5kg  | 23.5kg          | 28.0kg                   | 30.0kg          | 35.5kg          | 39.0kg  | 52.5kg          | 58.5kg   | 66.5kg          |