

Steca Solarix PLI

5000-48, 2400-24

The Steca Solarix PLI is the first product from Steca Elektronik to offer an all-in-one package. It allows users to supply consumers with 230 V AC power, charges the battery with an integrated MPPT charge controller, and at the same time permits connection to a generator or an available electricity grid. Everything in a single device. This means that solar energy can be used as the top priority, for example. And if that isn't enough, a generator can be started or the supply can be switched to the public grid. At the same time, the battery can also be recharged by either the generator or the grid. Given its very quick switchover time of up to 10 ms and its flexible energy priority selection, the Solarix PLI also acts as an uninterruptible power supply. Even difficult consumers, such as large AC motors, can be started reliably with dual overload capacity. The maximum power point tracker in the integrated charge controller ensures that, even in adverse weather conditions, the maximum output is obtained from the PV modules in order to optimally charge the battery and supply the consumers with power at the same time.



Product features

- True sine wave voltage
- High overload capacity
- Integrated MPP tracker
- Multistage charging technology
- Monthly equalisation charge
- Auxiliary contact for starting the generator
- Adjustable cut-off voltages
- Battery type: gel / liquid lead battery
- Lightweight construction
- Easy installation

Electronic protection functions

- Overcharge protection
- Reverse polarity protection of modules, for battery via fuse
- Deep discharge protection
- Short circuit protection of load and module
- Reverse polarity protection by internal fuse
- Reverse current protection at night
- Overtemperature and overload protection
- Acoustic alarm
- PE connection

Displays

- Graphical LC display
- 3 multi-coloured LEDs show operating states

Operation

- Simple menu-driven operation
- Programming by buttons

Interfaces

- RS-232 serial interface to PC
- Connection to PC via USB

Options

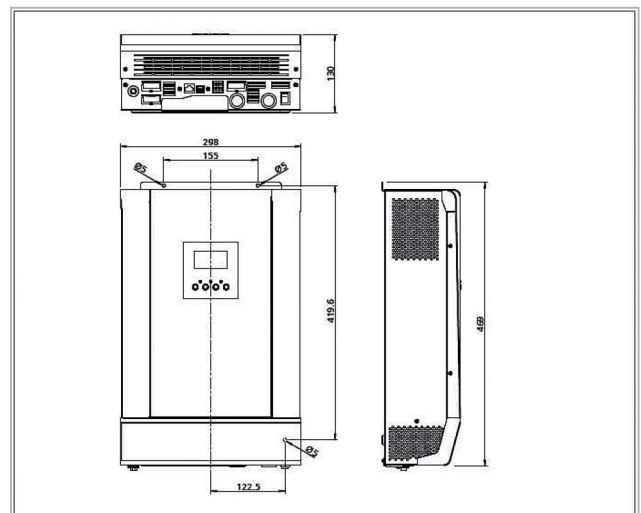
- Interconnectable in parallel or in three phases (parallel kit required)

Certificates

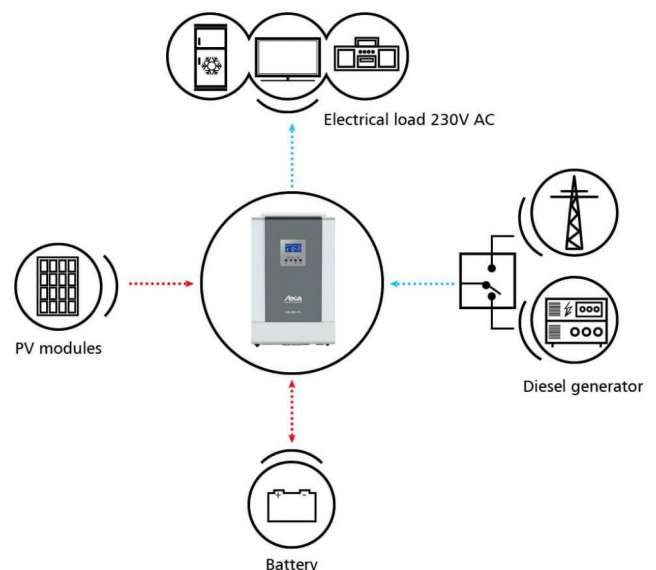
- Compliant with European Standards (CE)
- RoHS compliant
- Manufactured according to ISO 9001 and ISO 14001

Accessories

- PC software is enclosed



Solar priority with grid connection and/or generator:



| | 2400-24 | 5000-48 |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------|----------------------------|
| Characterisation of the operating performance | | |
| System voltage | 24 V | 48 V |
| Continuous power | 3000 VA | 5000 VA |
| Power 5 sec. | 6000 VA | 10000 VA |
| Max. efficiency sine wave | > 91 % | > 93 % |
| Max. efficiency charge controller | | > 98 % |
| Own consumption standby | 14.0 W | 15.0 W |
| Own consumption ON | 45.0 W | 50.0 W |
| Input side | | |
| Input voltage | 90 V AC ... 280 V AC | |
| Max. current on transfer system | 30 A | 40 A |
| Input frequency | 40 ... 65 Hz 50 / 60 Hz (automatic detection) | |
| Transfer time | 10 ms typical (UPS mode) | |
| AC output side | | |
| Output voltage | 220 V AC ... 240 V AC +/-5 % | 230 V AC +/-5 % |
| Output frequency | 50 / 60 Hz | |
| Battery side | | |
| Battery voltage | 20 V ... 30 V | 38.4 V ... 66 V |
| Max. charge current of PV | 40 A | 80 A |
| Max. charge current of AC | 30 A (programmable) | 60 A (programmable) |
| End of charge voltage | 27.0 V (programmable) | 54.0 V (programmable) |
| Boost charge voltage | 28.2 V (programmable) | 56.4 V (programmable) |
| Equalisation charge | 29.2 V (programmable) | 60.0 V (programmable) |
| Set battery type | liquid (programmable) | |
| DC input side charge controller | | |
| Min. MPP voltage | 30 V | 60 V |
| Max. MPP voltage | 80 V | 115 V |
| Min. open circuit voltage solar module / input (at minimum operating temperature) | 36 V | 72 V |
| Max. open circuit voltage solar module / input (at minimum operating temperature) | 100 V | 145 V |
| Max. module current | 40 A | 80 A |
| Nominal charge power | 1168 W | 4800 W |
| Own consumption | < 2 W | |
| Operating conditions | | |
| Operating temperature | 0 °C ... + 55 °C | |
| Storage temperature | - 15 °C ... + 60 °C | |
| Rel. humidity | < 95 %, non-condensing | |
| Maximum altitude | 2000 a.s.l | |
| Fitting and construction | | |
| Terminal (AC - fine / single wire) | 8 mm ² - AWG 8 | |
| Terminal (PV - fine / single wire) | 8 mm ² - AWG 8 | 12 mm ² - AWG 6 |
| Battery connection (M6 ring terminal included) | 35 mm ² ... 50 mm ² AWG 2 ... AWG 0 | |
| Double throw signal contact | 3 A / 250 V AC (max. 150 W) 3 A / 30 V DC | |
| Degree of protection | IP 21 | |
| Dimensions (X x Y x Z) | 275 x 385 x 114 mm | 298 x 469 x 130 mm |
| Weight | 7,6 kg | 11,5 kg |
| Cooling principle | fan | |

• Technical data at 25 °C / 77 °F