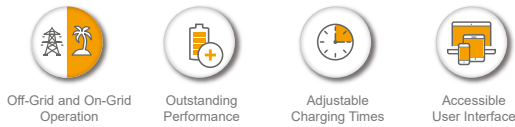


Hybrid Inverter PILUM



...the control center of your electrical self-consumption solution!



HIGHLIGHTS

- **3 kW hybrid inverter** - solar self-consumption from pv-generator and battery
- **Integrated MPPT charge controller** for lithium-ion-batteries
- **Flexible** - reliable energy supply in grid-parallel, emergency power and offgrid operation
- **Emergency power supply** with uninterruptible power supply for all relevant consumers
- **Best Grid Quality** - real sine wave output voltage
- **Simple Installation** using Plug & Play connctcors

OPERATION AND CONNECTORS

- 1 x DC connector for PV: Phoenix Sunclix
- 1 x DC disconnection switch for PV
- 1 x DC battery connection 120 A / 600 V (shape coded)
- 2 x AC connector: 1 x grid, 1 x offgrid/UPS

DISPLAY

LCD panel shows the system status and all important information.



The hybrid inverter PILUM is applicable to both on-grid and off-grid PV systems. It secures the intelligent control of the energy flow. During the day time, the PV plant generates electricity which can be provided to the loads, charge the battery or fed into the grid. The stored electricity can be released when the loads require it, especially during the nighttime.



PILUM 3

PART NO.: PI003122AF

PV Input (DC)

Max. power per input	3'200 W
Number of inputs / MPP Tracker	1
Nom. / max. DC voltage	360 V DC / 500 V DC
Start-up voltage	116 V DC
MPP voltage range	250 V DC – 450 V DC
Max. input current per MPP Tracker	13 A
Overload behaviour	Shift of working point

Battery Mode Input (DC)

Nom. DC voltage	51.2 V
Max. charge / discharge current	25 A / 82 A
Min. battery capacity	2.5 kWh
Battery voltage min. - max.	48 V - 56 V
Galvanic isolation	Yes
Safeguarding	Safety-fuse

Grid Feed-In (AC)

Nom. power AC	3'000 W
Max. power AC	3'000 VA
Number of phases	1
Typ. power per phase to grid	3'000 W
Nom. AC voltage	208, 220, 230, 240 V AC
AC voltage range	184 – 265 V AC
Grid frequency range	47.5 - 51.5 / 59.3 - 60.5 Hz

General Data

Dimension (WxHxD)	477 x 550 x 138 mm
Weight	19 kg
Idle state consumption	20 W
Display	LCD
DC disconnecting switch	Integrated
Protective relais	Integrated (VDE AR-N 4105)
Noise emission	max. 50 dBA
Operating temperature range	0 to +40°C
Installation altitude*	0 to 1000 m
Installation humidity	0 to 90% RH (non-condensing)
Degree of protection (IEC 60529)	IP20
Case material	Steel, powder-coated
On-grid operation	Grid-commutated
Energy source for battery charging	PV, Grid
WEEE registration number	DE70102013
Over temperature behaviour	Power reduction
DC Overvoltage category (IEC 60664-1)	II
AC Overvoltage category (IEC 60664-1)	III
Certificates	VDE 0126, VDE AR-N 4105, EN 62040-1, EN 62109
Warranty	2 years

Connections

DC connection for battery	Yes (1)
DC connection for PV	PhoenixContact Sunclix
AC connection for grid connection	Yes (3-pole)
AC connection for back-up operation	Yes (3-pole)
AC connection max. wire cross section	4 mm ²
Communication ports	Serial (RS232), USB

Supported Devices

Energy storage	DOMUS 2.5, DOMUS 3.0
Meter connection	Modbus (according to approval)

Power Conversion

PV (DC) to Grid (AC)	PV (DC) to Battery (DC)	Grid (AC) to Battery (DC)	Battery (DC) to Grid (AC)
Yes	Yes	Yes (if allowed)	Yes

Efficiency

PV (DC) to Grid (AC) [max.]	>96%
PV (DC) to Grid (AC) [EU]	>95%
Battery (DC) to Grid (AC) [max.]	>93%

Battery Mode AC-Connection

Nom. charging power	1'200 W
Nom. discharging power	3'000 W
Voltage shape in off-grid mode	True sinus
Number of current phases	1
Overload behavior	Current limitation
Switch-off in case of overload	After 5 seconds

Power factor	> 0.99
Topology	Transformerless
Feed-in	Yes (limitable)
Max. AC current per phase	13.6 A
AC voltage in off-grid mode	208, 220, 230, 240 V AC
AC frequency in off-grid mode	50 or 60 Hz

* Power derating of 2% per 100 m above 1000 m altitude.

Subject to change without further notice. Errors excepted.

