

SOLAR DIRECT DRIVE 1.5kW-425V

Pay-As-you-Go enabled low cost off-grid systems

empower
off-grid solutions



Integrated Digital
pre-heater control

HEATER 37% 67°C
T*:070°C dT:08°C

NEW PV oil press controller SDD1.5kW-425V-OE (with PayGo option):

Range: 0,75kW/1,1kW/1,5kW

- MPPT temperature and speed controller for oil press applications with autostart
- optional modem remote control and **Geo** location monitoring
- **Pay-As-You-Go** ready.



Option

PaygOps

Last-Mile Management System

The SDD1.5kW-425V-OE is EMPO-NI's **NEW** Solar Direct Drive automatically controlling a complete oil-press system e.g. from the (pre-)heating to the efficient drive of the oil press' gear motor at the Maximum Power Point.

The SDD's MPP control optimizes at any time of the operation process the distribution of all available power from the PV-panel array between the (pre-)heater and the gear motor to ensure fastest start-up and best oil pressing results.

The system is remotely controllable through the optional GSM modem and employs various safety and protection functions.

The SDD1.5kW-425V-OE is in an IP54(65) protected outdoor enclosure, passively cooled and provides a temperature sensor interface and PWM control output for the oil press heating element.

Fostering local business and value chain generation!

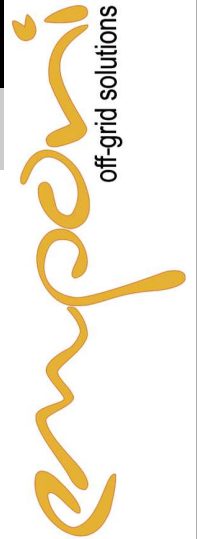
Sustainable technology protecting health and environment!

With a robust PV-voltage optimized 3-phase motor, you need less PV modules!

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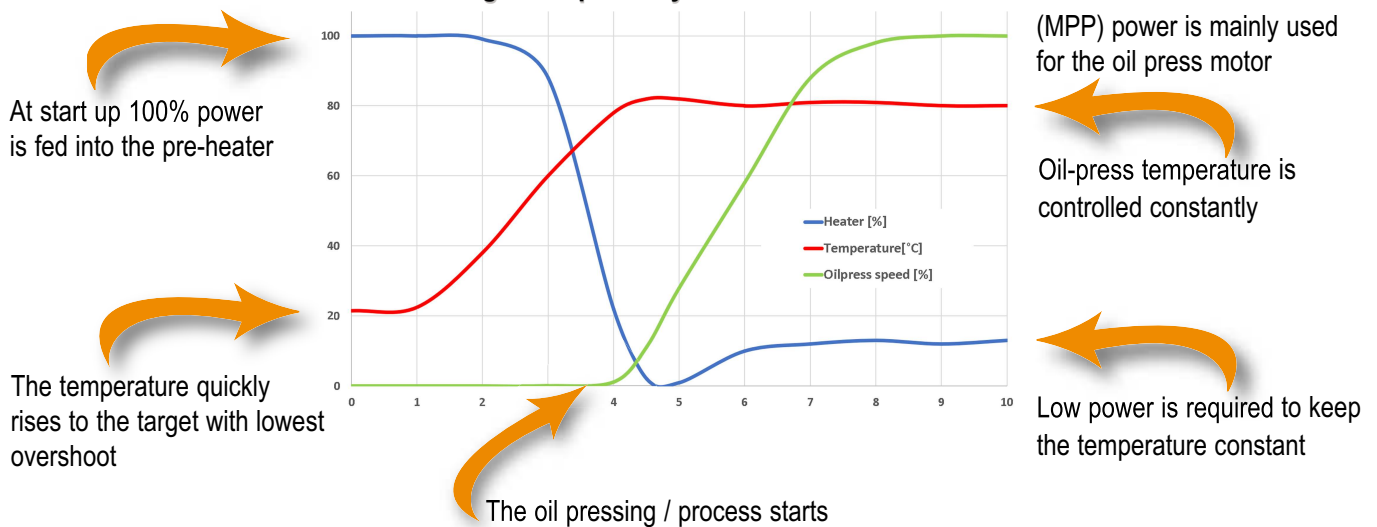
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Oil press PV-off-grid kit with temperature controlled 1.1kW oil press based on EMPO-NI's SDD1.5kW-425V-OE-1.1:

- only requires 7 PV panels of 60cells of at least 275Wp or 5 PV-panels of 72cells to make it run.
- using high-quality stainless-steel materials and hardened extruder screws for longest lifetime.
- the system complies with international safety and food processing standards

PV-off-grid oil press system automatic control



Interchangeable nozzles and seamlessly adjustable gap allow easy adaptation for efficient processing of most kernels and seeds like almond, apricot, argan, beechnut, black cumin, black currant, brazil nut, camelina, canola, cashew, cocoa butter, coconut, grape seed, hazelnut, hemp, jatropha, linseed, macadamia nut, mustard seed, peanut, pistachio, poppy seed, pumpkin seed, safflower, sesame, soya, sunflower seed, walnut and many more.



Up to 20kg of seeds and kernels can be processed per hour with the SDD1.5kW-425V-OE-1.1 and provide up to 35.000 liter per year of high quality vegetable oil.

No further running / operational costs such as diesel or gas or batteries!

Create sustainable local businesses and value chains!

EMPO-NI®, September 2021