

Solar central unit with supervisor

NEW

Complete central unit with synchronization to the public network and touchscreen combined with PLC. For selecting different operating types, electrical measurements and full supervision of 5 scenarios by touchscreen:

- Use of energy supplied by the solar panel.
- Recharges the batteries using the charger
- Automatic source inverter. Consumption of solar + battery energy then automatic switching to public network as soon as the batteries are flat.
- Use of solar energy in the day and the public network at night.
- Use of the energy supplied by the public electricity network.

TOUCHSCREEN

As well as being a control interface between the operator and the central unit, it displays all the electrical quantities needed to understand the operation. It has a simple and complete role of supervision, control and command.

SUPERVISOR

All the scenarios described above can be modified by means of the programming software of the PLC and touchscreen. The central unit can be networked.

SYNOPTIC ZONES

As well as supervision, SOLHAB enables the taking of conventional measurements on the 2 synoptic zones with the safety terminals.

Three indicator lamps provide general system information

TECHNICAL CHARACTERISTICS

On the top surface:

- 1 main ON/OFF switch.
- 1 24VDC batteries charging switch.
- 1 touchscreen 3x4" colour QVGA, 320 x 240 pixels, Ethernet socket.
- 1 emergency stop button.
- 1 solar load regulator.
- 1 set of signalling indicator lamps.
- 2 synoptics / complete diagram of the system with terminals and indicator lamps.
- Safety terminals for 230V-AC use output (200W from solar energy or 800W from the public network), 24VDC-10A from solar energy.

On the side:

- 2 safety terminals for voltage input from the solar panel.
- 1 main isolating switch from the public network.
- 1 solar panel isolating safety switch
- 1 RJ45 Ethernet connector.

In the cabinet

- 2 batteries 12VDC-12Ah.
- 1 battery charger 24V.
- 1 pure sine inverter 24VDC/230VAC-50Hz - 300W.
- 1 TWIDO PLC Ethernet.
- 1 analogue board 2 Inputs 0-10V/4-20mA and 1 Output 0-10V/4-20mA
- 1 4-port Ethernet coupler.
- 1 set of protection devices, differential circuit-breaker 30mA and fuse cartridges gPV, lightning arrester.
- 1 open door safety device

Photovoltaic solar panel on tilting frame

- Useful surface area of the cells 1.5m².
- Output 47VDC - 4.2A - 200Wc per panel on 2 photovoltaic terminals.
- Device for measuring the tilt angle
- Tilt adjustable from 5° to 70°
- Two ball joints with clamping levers for positioning the panel to the required tilt angle.
- Light and easy to move.

Dimensions:

Folded position: 1620 x 1060 x 100mm

Unfolded to 70° position: 2100 x 1060 x 700mm

System power by plug. 2P+E. 230VAC 50/60Hz



ref. SOLHAB

