



POWER PV630 Photovoltaic Inverter

- Maximum efficiency ≥ 98.7%.
- Permanent power 630 kVA at 50°C.
- Robustness and reliability.
- High MTBF.
- Latest MPPT technology.
- Latest generation IGBTs modules (Tj = 175°C).
- Protection devices for AC and DC.
- Adjustable power factor (0.95 inductive 0.95 capacitive).
- Voltage dips compensation.
- Installation Indoors/Outdoors

## **General description**

Supsonik POWER PV630 photovoltaic inverters are designed for a direct connection to a medium-voltage transformer. They are a robust and efficient solution for medium and large photovoltaic installations.

Thanks to the modulation latest technology, the IGBT transistors new generation and the excellent control algorithm used, these PV630 photovoltaic inverters generate, with maximum performance, a perfect sine-wave from the photovoltaic panels direct current. Maximum performance  $\geq$  98,7 % and European performance  $\geq$  98,5 %.

It is a unit with excellent features, such as, full power at 50°C, secure protection devices, high MTBF, minimum harmonic distortion even at low power, among others.

POWER PV630 photovoltaic inverters are easy to operate with intuitive software tools that allow the configuration of all parameters as well as the monitoring and display through a retro-illuminated Graphic display, with RS-485 communication and MODBUS RTU protocol.

Optional Data logger with remote control to send information through a high speed LAN connection (TCP / IP).

Our photovoltaic inverters design, the manufacturing process and quality tests, ensure our clients a maximum power generation, high efficiency energy conversion and compliance with applicable directives and standards in the European Union.

SUPSONIK offers the possibility to customize each machine according to the specific needs of our clients.

Supsonik S.L. manufactures a wide range of photovoltaic inverters, from **33 kVA to 1 MVA** maximum power.

For further information, please contact with the manufacturer.







DC INPUT	
Nominal power	642 kW
Peak power	710 kWp
MPPT voltage range	500 V – 820 V*
Maximum input voltage	1000 V
Maximum direct current	1422 A
Number of DC inputs	8+8
AC OUTPUT	
Nominal power	630 kVA @ 50°C Indoor/ 630 kVA @ 45°C Outdoor
Nominal power at 25°C	700 kVA
Nominal voltage ± 10%	3 x 315 V
Frecuency	50/60 Hz
Nominal current	1154 A
Current factor	0.95 inductive - 0.95 capacitive
Maximum harmonic distortion	< 3%
POWER CONSUMPTION	
Working internal consumption	≤ 1600 W
Stand-by consumption	≤ 110 W
External auxiliary power supply PERFORMANCE	3 x 400 V, 3 x 230 V
Maximum performance	≥ 98.7%
European performance ENVIRONMENTAL SPECIFICATIONS	≥ 98.5%
Protection level	Indoor: IP20 (IP23 optional) / Outdoor: IP54
Operating temperatura range	-15ºC to 50ºC
Storage temperature	-25ºC to 65ºC
Relative humidity	15% to 95% without condensation
Altitude	1000 meters above sea level
Cold air	6200 m <sup>3</sup> /h
DIMENSIONS AND WEIGHT	
Dimensions (Width x Depth x Height)	3556 x 800 x 2200 (mm)
Weight PROTECTIONS	2050 Kg
Protections	<ul> <li>Against grid overvoltage/undervoltage according to RD 1663/2000.</li> <li>Grid overfrecuency/underfrecuency detection according to RD 1663/2000.</li> <li>Manual grid disconnection.</li> <li>Against inverse polarization.</li> <li>Against insulation failure and DC voltage to Earth leakages.</li> <li>Against overload.</li> <li>Against output short circuit.</li> <li>Against asymetric and magnetizing currents.</li> <li>Motorized circuit breaker for DC side protection.</li> <li>Thermal-magnetic circuit breaker for AC side protection.</li> <li>Fuse in positive and negative for each string.</li> <li>Contactor for grid insulation.</li> <li>Preload contactor.</li> <li>Emergency stop.</li> </ul>
USER INTERFACE	
OP monitoring with display.	

- MODBUS, PROFIBUS, TCP/IP through RS485 and Ethernet communication protocols.
- PC communications software for monitoring (graphics, alarms, parameters modifications...) RS-232.

## **CERTIFICATIONS AND STANDARDS**

CE marking	EMC 61000-6-2, 61000-6-3 directive EN 50178 low voltage directive
According to Royal Decrees	RD 1663/2000
ENEL-DK5940 declaration of conformity	

<sup>\*</sup>Minimum Vdc with nominal Vac  $\pm 5\%$  and Cos  $(\phi) = 1$ 





