

### ZIGOR SOLAR SPI

#### Single-phase On-grid string inverters range

##### Description



The ZIGOR SOLAR SPI string inverters are easy operation devices that have been designed to cover the needs of all mains connected solar generation plants. In an effort to improve the yield of solar plants, these inverters offer a very high efficiency, exceeding 97%.

The ZIGOR SOLAR SPI inverters stand out due to its Web server application, accessible through its SNMP connection. In addition to this, the new string inverters range provides a LCD display, where the customer is able to access all inverter information, including production data.

The ZIGOR SOLAR SPI inverters can work at input DC voltages between 120 to 500 VDC and its housing has IP54/IP65.



Graphic LCD

##### Features

- > Maximum power point tracking (MPPT)
- > High energy efficiency, higher than 97%
- > Very low harmonic distortion, THD <3%
- > Direct mains connection
- > Unlimited parallel connection arrangements
- > Anti-islanding protection with automatic shut down
- > Monitoring from the unit with LCD
- > Protection against: inverse polarity, short-circuits, overvoltages, isolation failure
- > SNMP connection: Web server included
- > Range of input DC voltages (120-500 VDC)
- > Compact size, light weight, easy installation
- > Built-in production log capacity
- > 2 MPPT inputs

##### Connectivity and accessories

###### > Built-in & integrated Web Server

This is a PC-based Web server programme to provide full access to the inverter data and to monitor and communicate with ZIGOR SOLAR SP1 inverters.

on-grid solar plants

mid voltage solar plants

hybrid generation

energy saving

telecom back up

wind energy



ELECTRICAL CHARACTERISTICS					
Model	ZIGOR SOLAR SP1 2	ZIGOR SOLAR SP1 3,6	ZIGOR SOLAR SP1 4	ZIGOR SOLAR SP1 5	ZIGOR SOLAR SP1 7
Reference	301203	301204	301221	200075	301205
Max. Output power	2 KW	3,68 KW	4 KW	5 KW	6,6 KW
DC INPUT					
Nominal DC voltage	360V				
Maximum DC voltage (1)	500V				
Operating range DC	120-500V				
Operating range DC for MPPT	150-450V				
No. Independent MPPT	1(14.6 A Max)	2(12.2 A Max)	2(14 A Max)	2(17.65 A Max)	2(23.4 A Max)
AC OUTPUT					
No. Phases/No. Wires	1- phase/2- wires or 1 – phase/ 3 – wires (LNG)				
Nominal voltage AC	230V				
Nominal frequency	50/60 Hz				
Nominal output current AC	8.7 A	16 A	17.4 A	21.7 A	28.7 A
Harmonic distortion range for nominal current (2)	<3%				
Power factor	Over 0.99 (at nominal output current)				
Maximum efficiency	97%	97%	97,10%	97,10%	97,10%
European efficiency	96,5%	96,6%	96,6%	96,8%	96,7%
PROTECTION					
Input	Ground fault / DC isolation fault				
Output	Over-under voltage/ Over-under frequency / Islanding				
Protection class	IP 65 (electronics) / IP 54 (others)				
COMMUNICATIONS					
Protocol	MODBUS (RTU, TCP/IP, ASCII) y SNMP				
Standard	TCP/IP Ethernet				
Optional	RS485				
ENVIRONMENTAL CHARACTERISTICS					
Temperature	-20°C to +50°C/ -4°F to 122°F				
Relative humidity	0-90% without condensation				
Altitude	< 2000m				
MECHANICAL CHARACTERISTICS					
Dimensions mm (WxHxD)	470x525x195				
Estimated weight kg	20				
STANDARDS					
Certificates	CE Marking				
Directives	2004/108/CE 2006/95/CE				
Standards	UNE-EN 61000-6-3, UNE-EN 61000-6-2 UNE-EN 50178 IEC 62116				
Countries standards					
Italy	CEI 0-21				
Germany	VDE 0126-1-1				
England	G83/1-1				

These specifications may be changed without notice.

(1) This voltage must not be exceeded under any circumstances.

(2) For THDV<1% and Nominal Power.