

# ZGR SOLAR STR 100 / 120

## THREE-PHASE STRING INVERTERS

The **ZGR SOLAR STR100 / 120** offer high energy performance in a compact design, ideal for medium to large solar power plants.

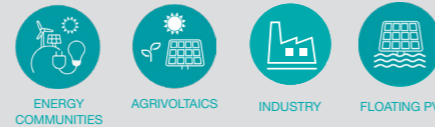
The ZGR SOLAR STR 100 / 120 string inverters are easy-to-use devices that have been designed to meet the needs of all grid-connected solar power plants without need for the use of transformers.

In an effort to improve the performance of solar power plants, these inverters offer high energy performance of over 98%. The ZGR SOLAR STR 100 / 120 inverters are equipped with LED indicators, to facilitate the user to manage the inverter.

This range of string inverters offers a voltage range DC input, at full load, between 550 to 850 Vdc; and a rating of protection IP 66.



### Applications



### Characteristics

- Multiple Maximum Power Point Trackers (MPPT)
- High energy efficiency greater than 98%.
- Very low harmonic distortion, THD <3%.
- Direct connection to grid or to step-up transformer
- Parallel connection without limitation
- Equipment monitoring via LED and Bluetooth connection via mobile device
- Anti-islanding protection with automatic disconnection
- Protection against:
  - Reverse polarization
  - Short circuits
  - Overvoltage
  - Insulation faults
- Compact design for easy installation

TECHNICAL SPECIFICATIONS		
Model	ZGR SOLAR STR100	ZGR SOLAR STR120
<b>INPUT [DC]</b>		
Max. PV voltage	1100 V	
MPPT range	550 - 850 Vdc	
Nominal input voltage	620 V	
DC starting voltage	200 V	
MPPT number	10	
Strings per MPPT	2	
Max. Current per MPPT	26 A	
Max. Short-circuit current per MPPT	35 A	
Max. DC Current	260 A	
<b>OUTPUT [AC]</b>		
Nominal AC output power	100 kW @30 °C	120 kW @30 °C
	100 kW @40 °C	110 kW @40 °C
	100 kW @50 °C	100 kW @50 °C
Max. AC apparent power	100 kVA	120 kVA
Max. AC output power	100 kW	120 kW
Nominal AC Voltage	400 Vac, 320 - 480 V	
AC Connection	3 W + N + PE	
AC frequency range	50 / 60 Hz (± 5 Hz) (adjustable)	
Nominal Output current	144,5 A	173,9 A
Max. Output current	147 A	176,4 A
Power factor range	0,8 captative - 0,8 inductive	
THDi	< 3%	
<b>EFFICIENCY</b>		
Efficiency (max) (%)	99 %	
Euroeta (%)	98,6 %	
<b>PROTECTIONS</b>		
Protections	DC switch, Anti-islanding Protection, Protection; Reverse Polarity DC Connection, String fault detection, Overvoltage DC/AC, Insulation Failure, Overcurrent Protection, AC short circuit.	
<b>ENVIRONMENTAL AND MECHANICAL CHARACTERISTICS</b>		
Topology	Transformerless	
Input terminal	Amphenol	
Cooling Method	Forced air cooling (Fan)	
Operating Temperature Range	-25°C - 60°C (>40°C derating)	
IP class	IP66	
Protection Degree	Clase I	
Noise emissions	≤ 65 dB	
Max. Operating altitude	< 4000m without derating	
Pollution Degree	PD3	
Relative Humidity	0 - 100% (non-condensing)	
Dimensions (Height x Width x Length)	1055 x 700 x 336 mm	
Weight	96 Kg	
<b>COMMUNICATIONS</b>		
Communications	RS485	
<b>REGULATIONS</b>		
Certificacions and standards	EN 62109-1: 2011 & EN 62109-2:2013; EN 61000-6-2 & EN 61000-6-4; VDE 0126-1-1; RD 244/2019 & UNE 217001:2020 ; EN206007 & UNE 217002:2020	

*These specifications may change without notice*

### Connections

