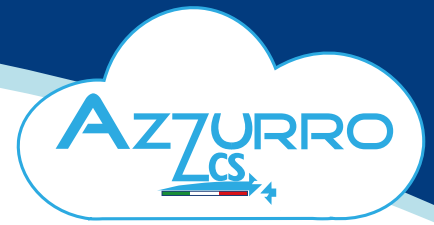


SINGLE PHASE STRING INVERTER

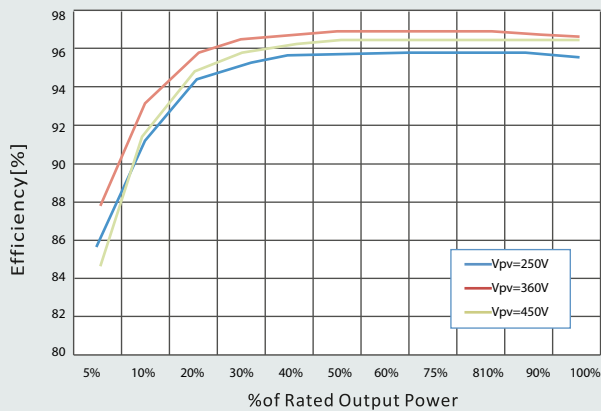
1100TL/1600TL/2200TL/2700TL/3000TL



ZCS Azzurro Single-phase is the ideal solution for small residential PV systems. The ZCS Azzurro series PV inverters are small, robust, install friendly and available in multiple sizes between 1 and 3 kW.

Thanks to the wide input voltage range are easy to configure and suitable for both new installation and retrofit on existing ones.

Through the multifunction graphic display all data is immediately available and the WiFi connection allows remote monitoring at no cost.



Efficiency Curve



AzzurroZCS Technology

- Harvesting optimizing
- Integration with ZCS WiFi platform for stable, effective and smart connectivity



High-yield

- Max. 97,2% efficiency
- Flat efficiency curves: optimum performances in every working condition
- Real time precise MPPT algorithm for max harvest



Flexible, cost effective and easy to install solution

- IP65 protection degree for both indoor and outdoor use
- Plug and play connections allow fast installation and maintenance
- Interface selection-Wi-Fi / RS485 / Dry Relay for more flexible configuration and system monitoring
- 4 inches graphic display



Reliability, Robustness, Flexibility

- Die casted, Rust-free, anti-UV aluminum covers
- Natural convection cooling
- Flexible monitoring solution
- 10 year warranty



Intelligent grid management

- Reactive power adjustable
- Self power reducer in case of over frequency
- Remote active/reactive power limit control



Ideal for Retrofit

- Wide input voltage range from 80V a 50V
- Compact size
- Easy to install and to configure





DATA SHEET



Azzurro ZCS - Single Phase String Inverter - 1100TL/1600TL/2200TL/2700TL/3000TL

Technical Data	1100TL	1600TL	2200TL	2700TL	3000TL
Input (DC)					
Rated DC Input Power	1100W	1600W	2200TL	2700TL	3000TL
No.of MPPT/String per MPPT	1/1				
Absolute Maximum input voltage	450V		500V		550V
Start-up input voltage	100V		120V		
Rated input voltage	360V				
MPPT voltage range	80-450V		100-500V		100-550V
DC voltage range at Full load	110-450V	165-450V	170-500V	200-500V	
Max.input current	10A		13A	13.5A	15A
Output (AC)					
Rated AC Power	1000W	1500W	2000W	2500W	2900W
Max.AC Power	1000W	1500W	2000W	2500W	2900W
Max.AC Output Current	4.5A	7A	9.5A	11.5A	13A
Rated Grid Voltage	L/N/PE 220,230,240V				
Grid Voltage Range	180~270V (According to local standard)				
Rated Frequency	50/60Hz				
Grid frequency Range	45~53 / 57~63 Hz (According to local standard)				
THD	<3%				
Power factor	1 (adjustable +/- 0.8)				
Grid connection	Single Phase				
Performance					
Max. efficiency	97%		97.1%		97.2%
Euro efficiency	95.2%	95.9%	96.1%	96.4%	96.5%
MPPT efficiency	>99.5%				
Standard					
EMC	EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4				
Safety standards	IEC 62109-1, IEC 62109-2				
Grid standards	AS 4777, VDE V 0124-100, VDE V 0126-1-1, VDE-AR-N 4105, ENS0438, G83/2, CEI 0-21, C10/11, RD1699				
Protection					
Anti-Islanding Protection	Yes				
DC Reverse Polarity Protection	Yes				
Over Temp Protection	Yes				
Leakage Current Protection	Yes				
Over Voltage Protection	Yes				
Over Current Protection	Yes				
Earth Fault Protection	Yes				
Communication					
Standard Communication Mode	wifi (optional) + RS485 + SD card				
Operational Data Storage	25 years				
Relay	Yes				
I/O	Yes				
General data					
DC Switch	Optional				
Ambient temperature range	-25°C...+60°C				
Isolation Level	Transformerless				
Cooling	Natural				
Relative humidity	0...95% no condensing				
Max.operating altitude	2000m				
Sound Power Level	<25db@1m				
Degree of Protection (per IEC 60529)	IP65				
Dimension (H x L x P)	405*314*135mm				
Weight	11kg		12kg		
Self-consumption at night	<1w				
Display	Graphic Display				
Warranty	10 years				



AS4777 G83/2 G59/3

CE, CEI 0-21, CQC, IEC, VDE-AR-N4105/VDE-0126, EMC, C10/11, EN50438, RD1669