

# ZCS AZZURRO - HV SERIES THREE-PHASE STRING INVERTER

3PH 250KTL-HV/255KTL-HV



- » Maximum yield 99%
- » Protection class of IP66
- » Updates and diagnostics via USB
- » Forced convection with speed-controlled cooling
- » Class II surge protection devices (AC and DC)
- » 5 or 10 year ZCS warranty
- » Wide operating range from 500V to 1500V for enhanced configuration flexibility
- » Up to 12 independent MPPT channels



TECHNICAL DATA	3PH 250KTL-HV	3PH 255KTL-HV
<b>DC Input data</b>		
Typical DC power*	306000W	
Maximum DC power for each MPPT	13000W (500V-850V)	
No. of independent MPPTs/N.o of strings per MPPT	12/2	
Maximum DC input voltage	1500V	
Start-up voltage	550V	
Nominal DC input voltage	1160V	
MPPT DC voltage range	500V-1500V	
DC voltage range at full load	800V-1300V	
Maximum input current for each MPPT	30A	
Maximum absolute current for each MPPT	50A	
<b>AC Output data</b>		
Rated AC power	250kW	255kW
Maximum AC power	250kVA	255kVA
Maximum AC current per phase	180.5A	184A
Connection type/Rated grid voltage	Three-phase 3PH/PE 800V (PH-PH)	
Grid voltage range	370V~530V (PH-N); 640V~920V (PH-PH) (according to the local grid standards)	
Rated grid frequency	50Hz/60Hz	
Grid frequency range	45Hz~55Hz / 54Hz~66Hz (according to the local grid standards)	
Total harmonic distortion	<3%	
Power factor	1 (programmable +/-0.8)	
Active power adjustment range (settable)	0~100%	
Grid feed-in limit	Feed adjustable from zero to nominal power value**	
<b>Efficiency</b>		
Maximum efficiency	99.02%	
Weighted efficiency (EURO)	98.7%	
MPPT efficiency	>99.9%	
Consumption at night	<1W	
<b>Protection</b>		
Internal interface protection	No	
Safety protections	Anti-islanding, RCMU, Ground Fault Monitoring	
Reverse polarity protection DC	Yes	
DC circuit breaker	Integrated	
Overheating protection	Yes	
Overvoltage category/Protection class	Overvoltage Category III / Protection class I	
Integrated dischargers	AC/DC: Type 2 standard	
<b>Standard</b>		
EMC	EN 61000-6-2/4, EN 61000-3-11/12	
Safety standard	IEC 62109-1/2, IEC62116, IEC61727, IEC61683, IEC60068(1,2,14,30)	
Grid connectio standard	Connection certificates and standards available at <a href="http://www.zcsazzurro.com">www.zcsazzurro.com</a>	
<b>Communication</b>		
Communication interfaces	Wi-Fi/4G/Ethernet (optional), RS485 (proprietary protocol), USB, Bluetooth	
<b>General data</b>		
Allowable ambient temperature range	-30°C...+60°C (power limit above 35°C)	
Topology	Transformerless	
Environmental protection class	IP66	
Allowable relative humidity range	0%.....100%	
Maximum operating altitude	5000m (power limit above 4000m)	
Noise level	< 60dB @ 1mt	
Weight	100kg	
Cooling	Forced fan convection	
Dimensions (H x L x D)	713.5mmx1100.5mm x368 mm	
Display	Led indicators, Bluetooth + app	
Warranty	5 or 10 years	

\* The typical DC power does not represent a maximum applicable power limit. The online configurator available at [www.zcsazzurro.com](http://www.zcsazzurro.com) will provide any applicable configurations.

\*\* Possible by using a specific meter