

ZCS AZZURRO - HV SERIES THREE-PHASE STRING INVERTER

3PH 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 255KTL-HV
DC Input data

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

AC Output data

Rated AC power	255kW
Maximum AC power	255kVA
Maximum AC current per phase	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**

Efficiency

Maximum efficiency	99.02%
Weighted efficiency (EURO)	98.7%
MPPT efficiency	>99.9%
Consumption at night	<1W

Protection

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

Standard

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 www.zcsazzurro.com

Communication

Communication interfaces	Wi-Fi/4G/Ethernet (optional), RS485 (proprietary protocol), USB, Bluetooth
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General data

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 will provide any applicable configurations.

** Possible by using a specific meter