

ZCS AZZURRO - THREE-PHASE STRING INVERTER

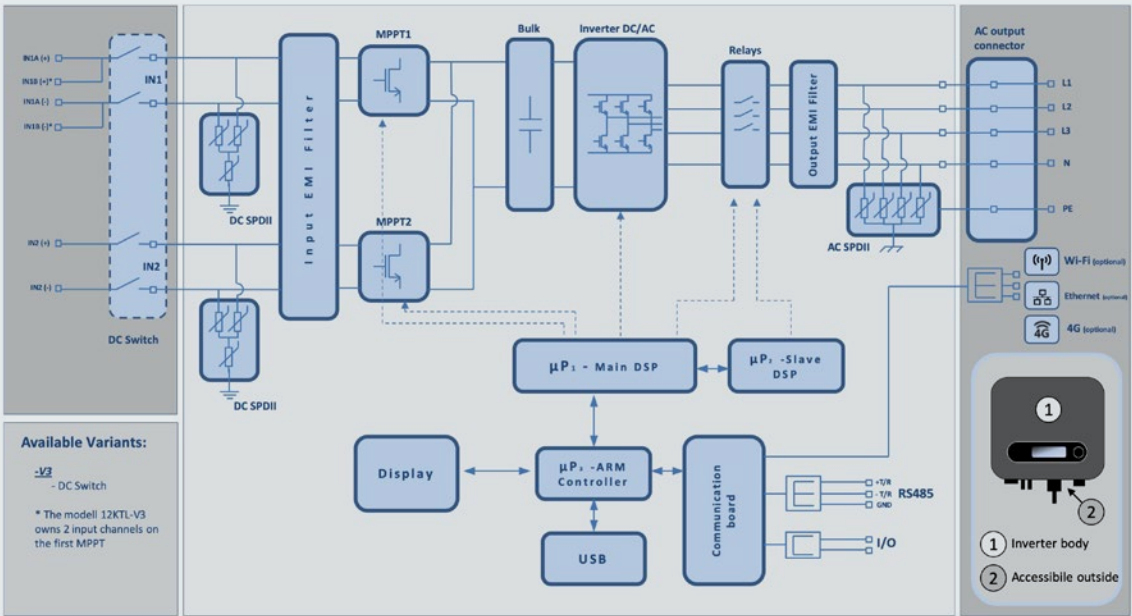
3PH 3.3KTL-V3/3PH 4.4KTL-V3/3PH 5.5KTL-V3/3PH 6.6KTL-V3/3PH 8.8KTL-V3/3PH 11KTL-V3/3PH 12KTL-V3



- » Maximum yield 98.5%
- » Dual input section with independent MPPTs
- » Updates and diagnostics via USB
- » 5 or 10 year ZCS warranty
- » “Zero Grid Feed-in” functionality
- » Possibility to manage reactive power
- » Wide operating input range from 140V to 1000V also suitable for small-sized string systems



BLOCK DIAGRAM



TECHNICAL DATA	3PH 3.3KTL-V3	3PH 4.4KTL-V3	3PH 5.5KTL-V3	3PH 6.6KTL-V3	3PH 8.8KTL-V3	3PH 11KTL-V3	3PH 12KTL-V3
DC Input data							
Typical DC power*	3960W	5280W	6600W	7920W	10560W	13200W	14400W
Maximum DC power per MPPT	3550W (320V-850V)	4500W (410V-850V)	5700W (520V-850V)	6250W (570V-850V)	6200W(560V-850V)		6850W (620V-850V)
No. of independent MPPTs / No. of strings per MPPT	2/1						2/(2/1)
Maximum DC input voltage	1100V						
Start-up voltage	160V						
Nominal DC input voltage	650V						
MPPT DC voltage range	140V-1000V						
DC voltage range at full load	160V-850V	190V-850V	240V-850V	290V-850V	380V-850V	420V-850V	420V-850V
Maximum input current per MPPT	15A/15A						30A/15A
Maximum absolute current per MPPT	22.5A/22.5A						45A/22.5A
AC Output data							
Rated AC power	3000W	4000W	5000W	6000W	8000W	10000W	12000W
Maximum AC power	3300VA	4400VA	5500VA	6600VA	8800VA	11000VA	13200VA
Maximum AC current per phase	5A	6.7A	8.3A	10A	13.3A	16.7A	20A
Connection type/Rated grid voltage	Three-phase 3PH/N/PE 220V/230V/240V (PH-N); 380V/400V/415V (PH-PH) o Three-phase 3PH/PE 380V/400V/415V (PH-PH)						
Grid voltage range	184V~276V (PH-N); 310V~480V (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-in adjustable from zero to nominal power value**						
Efficiency							
Maximum efficiency	98.4%				98.5%		
Weighted efficiency (EURO)	97.5%				98%		
MPPT efficiency	>99.9%						
Consumption at night	<1W						
Protections							
Internal interface protection	Yes						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 MOV: Type 2 standard						
Standard							
EMC	EN 61000-6-1/2/3/4,						
Safety standard	IEC 62116, IEC 61727, IEC 61683, IEC 60068-1/2/14/30, IEC 62109-1/2						
Grid connection standard	Connection certificates and standards available at www.zcsazzurro.com						
Communication							
Communication interfaces	Wi-Fi/4G/Ethernet (optional), RS485 proprietary protocol) USB, Bluetooth						
General data							
Allowable ambient temperature range	-30°C...+60°C (power limit above 45°C)						
Topology	Transformerless						
Environmental protection class	IP65						
Allowable relative humidity range	0%.....95% non-condensing						
Maximum operating altitude	4000m						
Noise level	< 40dB @ 1mt						
Weight	17kg				18kg		
Cooling	Natural convection						
Dimensions (H x L x D)	430mmx385mmx182mm						
Display	LCD						
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