

AZZURRO - THREE-PHASE STRING INVERTER

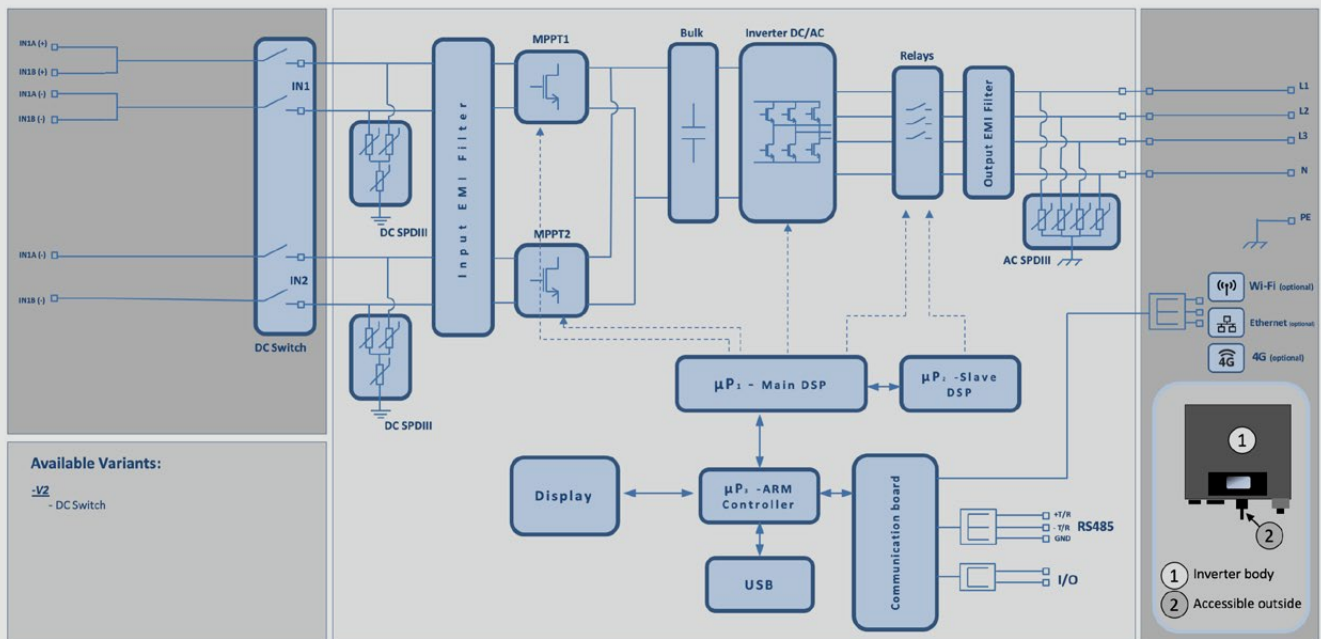
10KTL-V2/12KTL-V2/15KTL-V2



- Maximum performance 98.3%
- Dual input section with independent MPPTs
- Integrated string combiner with different configuration options
- Natural ventilation cooling
- 5 or 10 year ZCS warranty
- "Zero Grid Feed-in" functionality *
- Wide operating input range from 160V to 960V also suitable for small string systems

* Possible through current sensor (ZSM-ZEROINJ)

FLOW CHART



TECHNICAL DATA	3PH 10KTL-V2	3PH 12KTL-V2	3PH 15KTL-V2
DC input			
Typical DC power *	12000W	14400W	18000W
Maximum DC power on each MPPT	10000W/7500W (500V-800V)	10000W/7500W (500V-800V)	10000W/7500W (500V-800V)
Independent MPPTs/Strings each MPPT		2/(2/1)	
Maximum DC voltage		1000V	
Start-up voltage		200V	
Nominal DC voltage		600V	
MPPT range in DC		160V-960V	
Full power range in DC		300V-840V	
Maximum DC input current each MPPT		21A/11A	
Maximum absolute DC input current each MPPT		30A/15A	
AC output			
Nominal AC Power	10000W	12000W	15000W
Maximum AC Power	11000VA	13200VA	16500VA
Maximum AC current each phase	16.5A	20A	24A
Type of connection/Nominal AC grid voltage	Three phase 3PH/N/PE 220V/230V/240V (PH-N); 380V/400V/415V (PH-PH) or Three phase 3PH/PE 380V/400V/415V (PH-PH)		
AC voltage range	184V~276V (PH-N); 310V~480V (PH-PH) (according to local standards)		
Nominal AC frequency	50Hz/60Hz		
AC frequency reange	45Hz~55Hz / 54Hz~66Hz (according to local standards)		
Total Harmonic Distortion (THD)	<3%		
Power factor	1 (set +/-0.8)		
Active power adjustability range	0~100%		
Active power grid injection	Possible to adjust from 0 to nominal AC power **		
Efficiency			
Maximum Efficiency	98.3%		
Euro efficiency	98.0%		
Efficiency MPPT	>99.9%		
Night time consumption	<1W		
Protections			
Internal interface protection	Yes	No	
Safety protections	Anti islanding, RCMU, Ground Fault Monitoring		
DC reverse polarity protection	Yes		
DC switch	Integrated		
Overheating protection	Yes		
Overvoltage category/Protection class	Overvoltage Category III / Protective class I		
Integrated dischargers	AC/DC MOV: Type 3 standard		
Standards			
EMC	EN 61000-6-1/3		
Safety standards	IEC 62116, IEC 61727, IEC 61683, IEC 60068-1/2/14/30, IEC 62109-1/2		
Grid standards	Grid standards and certificates available on www.zcsazzurro.com		
Communication			
Interfaces	Wi-Fi/4G/Ethernet (optionals), RS485 (proprietary protocol), USB		
Additional I/O	I/O inputs for Antireverse power controller device		
Environmental data			
Temperature working range	-25°C...+60°C (power derating over 45°C)		
Topology	Transformerless		
Environmental protection degree	IP65		
Humidity range	0%.....95% no condensing		
Maximum operative altitude	2000m		
Acoustic noise	< 45dB @ 1mt		
Weight	23.5Kg	25Kg	
Cooling system	FANs cooled		
Dimensions (H*L*P)	452mm*539mm*202 mm		
Display	LCD		
Warranty	10 years		

* Typical Dc power is not an absolute maximum rating. Online configurator available on www.zcsazzurro.com will guide the user on valid and possible configurations

** Possible using Antireverse Power Controller (ZSM-ZEROINJ)