

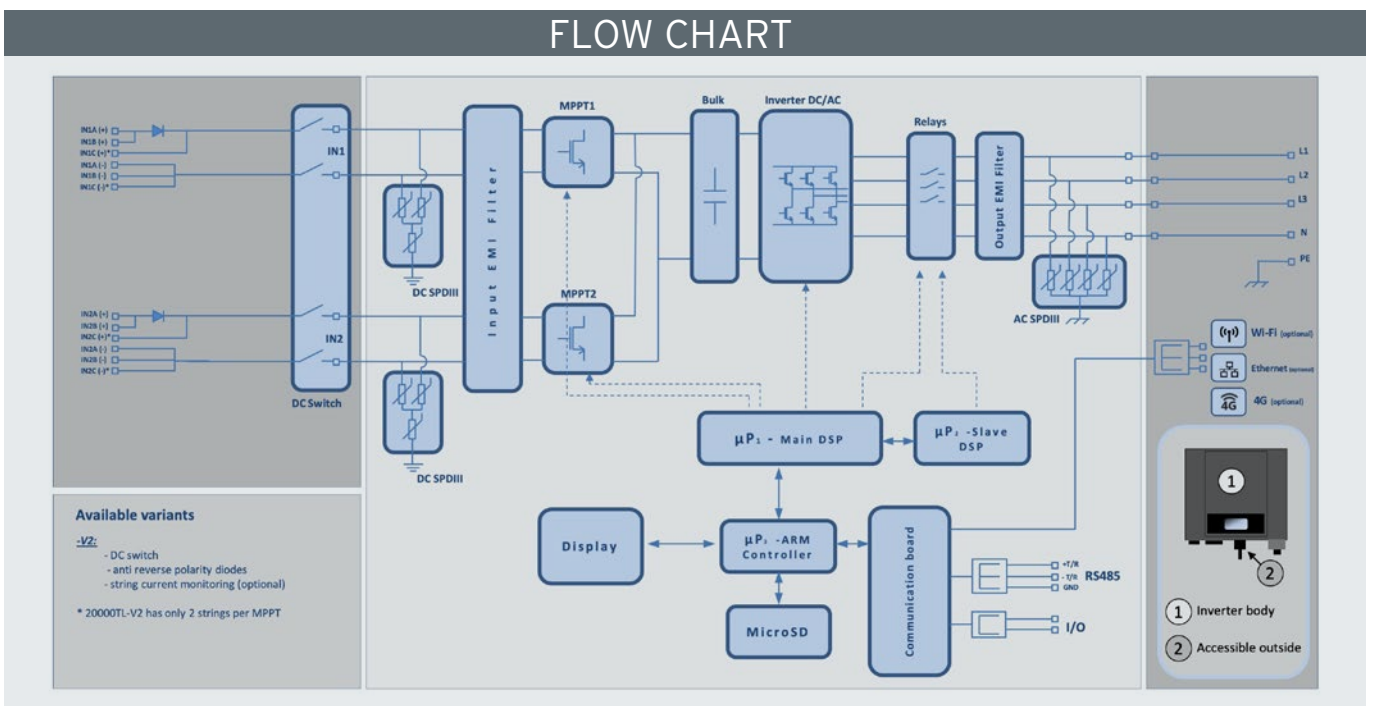
ZCS AZZURRO - THREE-PHASE STRING INVERTER

20000TL-V2/25000TL-V2/30000TL-V2/33000TL-V2



- » Maximum yield 98.6%
- » Dual input section with independent MPPTs
- » Fast connection without the need to access internal parts
- » Updates and diagnostics via SD card
- » 5 or 10 year ZCS warranty
- » "Zero Grid Feed-in" functionality
- » Wide operating input range from 230V to 950V also suitable for small-sized string systems

FLOW CHART



TECHNICAL DATA	3PH 20000TL-V2	3PH 25000TL-V2	3PH 30000TL-V2	3PH 33000TL-V2
DC Input data				
Typical DC power*	24000 W	30000 W	36000 W	39600 W
Maximum DC power for each MPPT	13000 W	16000 W	18000 W	20000 W
No. of independent MPPTs / No. of strings per MPPT	2/2	2/3		
Maximum DC input voltage	1100V			
Start-up voltage	250V			
Nominal DC input voltage	620V			
MPPT DC voltage range	230V-950V			
DC voltage range at full load	480V-850V	460V-850V	520V-850V	580V-850V
Maximum input current for each MPPT	24A/24A	28A/28A	30A/30A	
Maximum absolute current for each MPPT	30A/30A	35A/35A	37.5A/37.5A	
Maximum current per string***	-	12A		
AC Output data				
Rated AC power	20000 W	25000 W	30000 W	33000 W
Maximum AC power	22000VA	27500VA	33000VA	36300VA
Maximum AC current per phase	32A	40A	48A	53A
Connection type/Rated 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)			
Grid voltage range	184V~276V (PH-N); 320V~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	98.2%	98.4%		98.6%
Weighted efficiency (EURO)	98%	98.2%		
MPPT efficiency	>99.9%			
Consumption at night	<1W			
Protections				
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 MOV: Type 3 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 on www.zcsazzurro.com			
Communication				
Communication interfaces	Wi-Fi (Optional), RS485 (proprietary protocol), SD card			
Additional inputs or connections	I/O inputs for connection to anti-reverse power controller			
Data storage on SD	25 years			
General data				
Allowable ambient temperature range	-25°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	2000m			
Noise level	< 30dB @ 1mt	< 45dB @ 1mt		
Weight	37Kg			
Cooling	Natural convection	Forced fan convection	Forced fan convection	Forced fan convection
Dimensions (H x W x D)	666mm x 512mm x 254mm			
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 connecting anti-reverse power controller (ZSM-ZEROINJ)

*** models with more than two strings per MPPT have internal protection diodes, higher string currents than those reported may cause diode interruption