

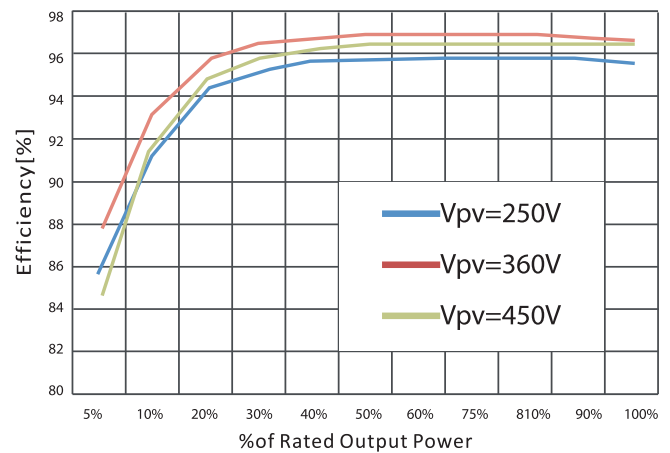
# AZZURRO - SINGLE-PHASE STRING INVERTER PLUS SERIES

3000TLM/3680TLM/4000TLM/4600TLM  
5000TLM/6000TLM

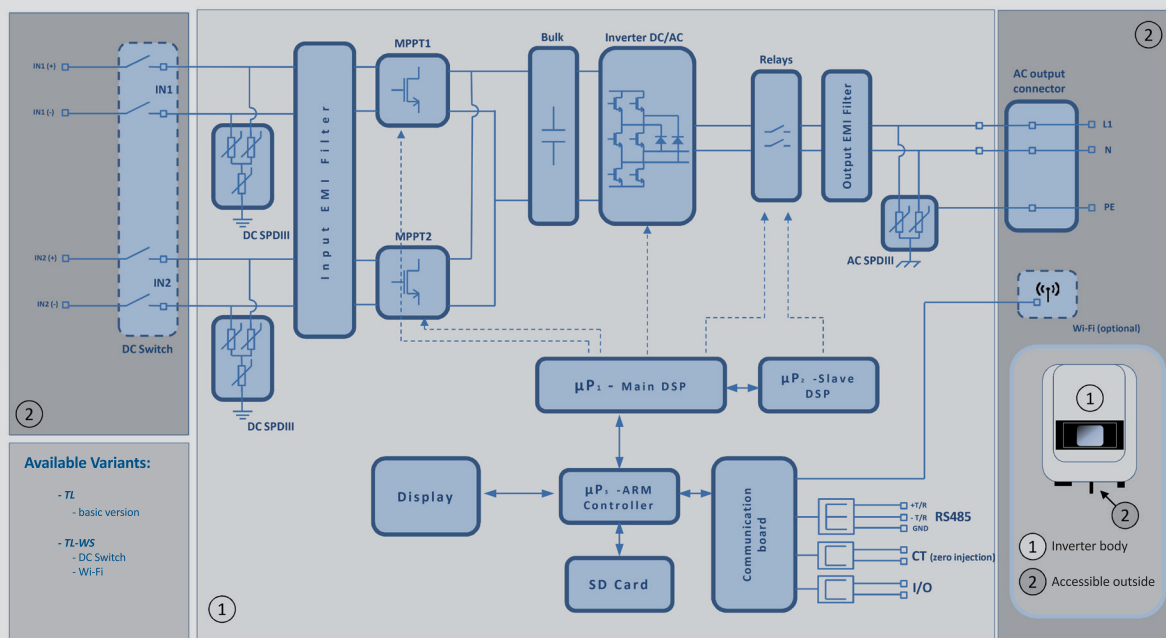


- Maximum performance 97.6%
- Dual input section with independent MPPTs
- 4-inch LCD graphic display
- 5 or 10 year ZCS warranty
- Wide input operating range from 100V to 550V

## EFFICIENCY CURVE



## FLOW CHART



TECHNICAL SPECIFICATIONS	3000TLM	3680TLM	4000TLM	4600TLM	5000TLM	6000TLM
<b>DC Input data</b>						
Maximum DC Power	3300W	4000W	4400W	5000W	5500W	6600W
Maximum DC power for each MPPT	2000W (200V-500V)	2400W (200V-500V)	2600W (200V-500V)	3000W (200V-500V)		3150W (250V-520V)
No. of independent MPPTs / No. of strings per MPPT	2/1					
Maximum DC input voltage	600V					
Start-up voltage	100V	120V				
Nominal DC input voltage	360V					
MPPT DC voltage range	80V-580V	100V-580V				
DC voltage range at full load	160V-520V	165V-520V			175V-520V	250V-520V
Maximum input current for each MPPT	10A/10A	12A/12A	13A/13A	15A/15A		
Maximum absolute current for each MPPT	12A/12A	14A/14A	16A/16A	18A/18A		
<b>AC Output data</b>						
Rated AC power	3000W	3680W	4000W	4600W	5000W	6000W
Maximum AC power	3000VA	3680VA	4000VA	4600VA	5000VA	6000VA
Maximum AC current	13A	16A	17.5A	20A	22A	26A
Connection type/Nominal grid voltage	Single-phase L/N/PE / 220V, 230V, 240V					
Grid voltage range	180V~270V (according to the local grid standards)					
Rated grid frequency	50Hz/60Hz					
Grid frequency range	45Hz~53Hz / 57Hz~63Hz (according to the local grid standards)					
Total harmonic distortion	<3%					
Power factor	1 (Programmable +/-0.8)					
Active power adjustable range	0~100%					
Grid feed limit	Feed adjustable from zero to nominal power value*					
<b>Efficiency</b>						
Maximum efficiency	97.6%					
Weighted efficiency (EURO)	97.1%/97.3%					
MPPT efficiency	>99.9%					
Consumption at night	<1W					
<b>Protections</b>						
Internal interface protection	Yes					
Safety protections	Anti-islanding, RCMU, Ground Fault Monitoring					
Reverse polarity protection DC	Yes					
DC circuit breaker	Optional (present in models - WS)					
Overheating protection	Yes					
Overvoltage category/Protective class	Overvoltage Category III / Protective class I					
Integrated dischargers	AC/DC MOV: Type 3 Standard					
<b>Standard</b>						
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	AS 4777, AS 3100, VDE-AR-N 4105, EN50438, G83/G59, C10/11, CEI 0-21					
<b>Communication</b>						
Communication interfaces	Wi-Fi (only models -WS), RS485 (proprietary protocol), SD card					
Additional inputs or connections	Input for current sensor connection					
Data storage on SD	25 years					
<b>General data</b>						
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	< 25dB @ 1mt					
Weight	18Kg			19Kg		
Cooling	Natural convection					
Dimensions (H x L x D)	478mm x 344mm x 170mm					
Display	LCD					
Warranty	5 or 10 years					

\* Possible by connecting a current sensor (ZST-ACC-TA)








**AS4777 G83/2 G59/3**  
 CE, CEI 0-21, CQC, IEC, VDE-AR-N4105/VDE-0126, EMC, C10/11, EN50438, RD1669