

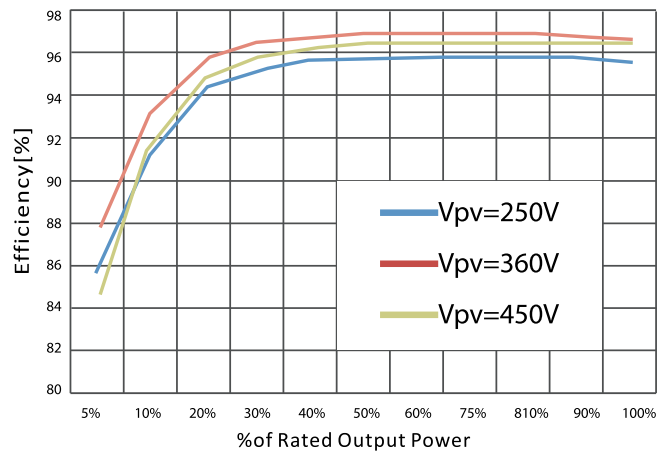
AZZURRO - SINGLE-PHASE STRING INVERTER PLUS SERIES

1PH 3000TLM-V1/1PH 3680TLM-V1
 1PH 4000TLM-V1/1PH 4600TLM-V1
 1PH 5000TLM-V1/1PH 6000TLM-V1

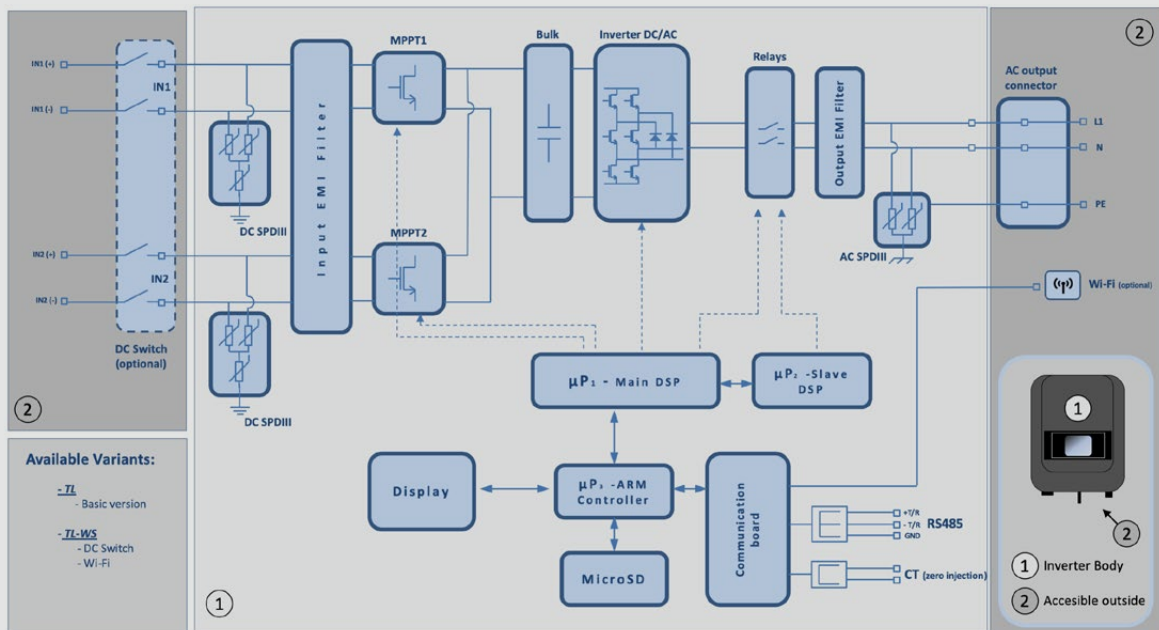


- Maximum performance 97.6%
- Dual input section with independent MPPTs
- Fast and safe installation with all required parts included
- 4-inch LCD graphic display
- 5 or 10 year ZCS warranty
- Wide input operating range from 80V to 580V

EFFICIENCY CURVE



FLOW CHART



TECHNICAL DATA	1PH 3000TLM-V1	1PH 3680TLM-V1	1PH 4000TLM-V1	1PH 4600TLM-V1	1PH 5000TLM-V1	1PH 6000TLM-V1
DC input						
Typical DC power *	3300W	4048W	4400W	5060W	5500W	6600W
Maximum DC power on each MPPT	2000W (200V-500V)	2400W (200V-500V)	2600W (200V-500V)	3000W (200V-500V)		3150W (250V-520V)
Independent MPPTs/Strings each MPPT	2/1					
Maximum DC voltage	600V					
Start-up voltage	100V	120V				
Nominal DC voltage	360V					
MPPT range in DC	80V-580V	100V-580V				
Full power range in DC	160V-520V	165V-520V			175V-520V	250V-520V
Maximum DC input current each MPPT	10A/10A	12A/12A	13A/13A	15A/15A		
Maximum absolute DC input current each MPPT	12A/12A	14A/14A	16A/16A	18A/18A		
AC output						
Nominal AC Power	3000W	3680W	4000W	4600W	5000W	6000W
Maximum AC Power	3000VA	3680VA	4000VA	4600VA	5000VA	6000VA
Maximum AC current each phase	13A	16A	17.5A	20A	22A	26A
Type of connection/Nominal AC grid voltage	Single phase L/N/PE / 220V,230V,240V					
AC voltage range	180V~276V (according to local standards)					
Nominal AC frequency	50Hz/60Hz					
AC frequency reange	45Hz~55Hz / 54Hz~64Hz (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	97.6%					
Euro efficiency	97.1%/97.3%					
Efficiency MPPT	>99.9%					
Night time consumption	<1W					
Protections						
Internal interface protection	Yes					
Safety protections	Anti islanding, RCMU, Ground Fault Monitoring					
DC reverse polarity protection	Yes					
DC switch	Optional (only for models -WS)					
Overheating protection	Yes					
Overvoltage category/Protection class	Overvoltage Category III / Protective class I					
Integrated dischargers	AC/DC MOV: Type 3 standard					
Standards						
EMC	EN 61000-6-1/2/3/4,					
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 (only for models -WS), RS485 (proprietary protocol), SD card					
Additional I/O	Current sensor connection input					
SD card data storage	25 years					
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	< 25dB @ 1mt					
Weight	18Kg			19Kg		
Cooling system	Natural cooled					
Dimensions (H*L*P)	478mm*344mm*170mm					
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 current sensor (ZST-ACC-TA)