

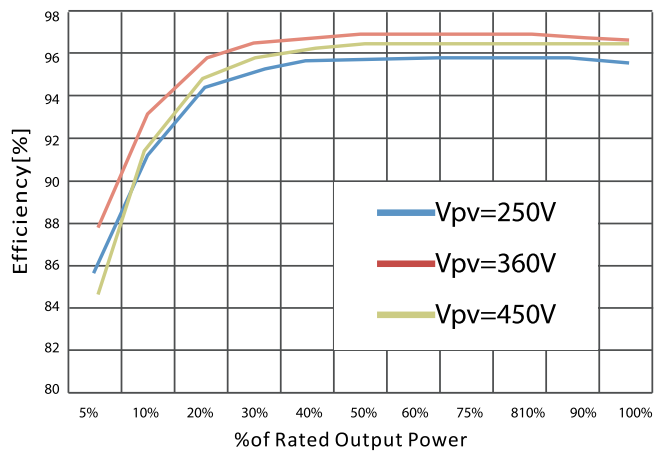
# AZZURRO - SINGLE-PHASE STRING INVERTER PLUS SERIES

1100TL-V1/1600TL-V1/2200TL-V1  
2700TL-V1/3000TL-V1

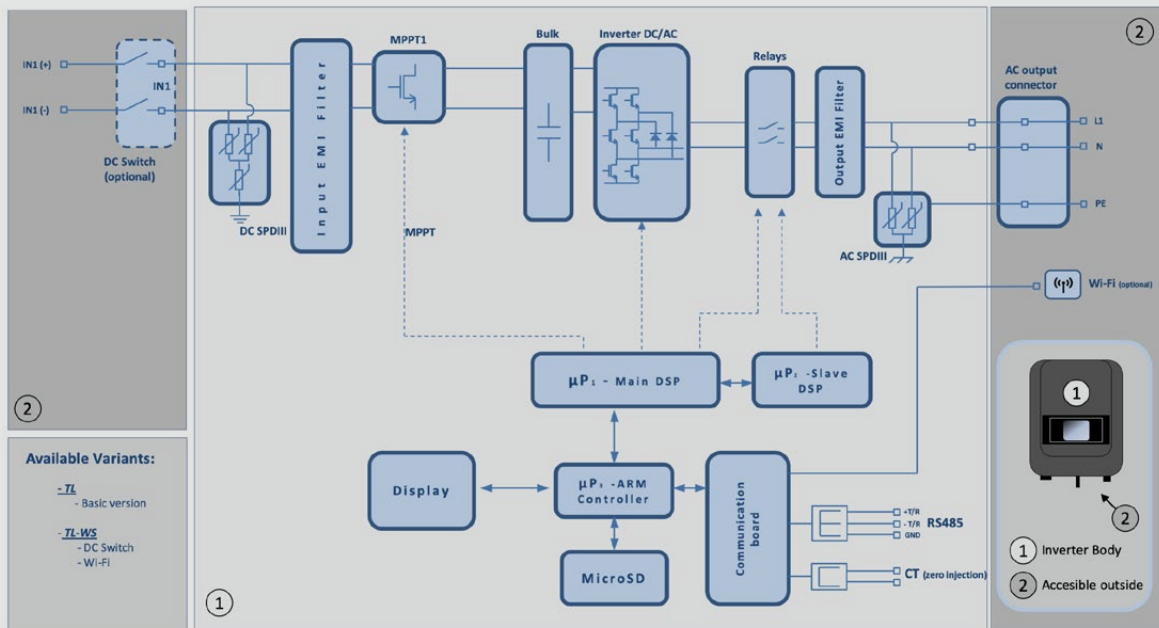


- Maximum performance 97.2%
- Single MPPT channel
- Fast and safe installation with all required parts included
- 4-inch LCD graphic display
- 5 or 10 year ZCS warranty
- Wide input operating range from 90V to 500V

## EFFICIENCY CURVE



## FLOW CHART



TECHNICAL DATA	1PH 1100TL-V1	1PH 1600TL-V1	1PH 2200TL-V1	1PH 2700TL-V1	1PH 3000TL-V1
<b>DC input</b>					
Typical DC power *	1210W	1760W	2420W	2970W	3300W
Independent MPPTs/Strings each MPPT	1/1				
Maximum DC voltage	450V		500V		
Start-up voltage	100V		120V		
Nominal DC voltage	360V				
MPPT range in DC	80V-450V		100V-500V		
Full power range in DC	110V-450V	165V-450V	170V-500V	200V-500V	
Maximum DC input current each MPPT	10A		13A	13.5A	15A
Maximum absolute DC input current each MPPT	12.5A		16.5A	17A	19A
<b>AC output</b>					
Nominal AC Power	1000W	1550W	2100W	2600W	3000W
Maximum AC Power	1000VA	1550VA	2100VA	2600VA	3000VA
Maximum AC current each phase	4.5A	7A	9.5A	11.5A	13A
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 **				
<b>Efficiency</b>					
Maximum Efficiency	97%		97.1%		97.2%
Euro efficiency	95.2%	95.9%	96.1%	96.4%	96.5%
Efficiency MPPT	>99.9%				
Night time consumption	<1W				
<b>Protections</b>					
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				
<b>Standards</b>					
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 <a href="http://www.zcsazzurro.com">www.zcsazzurro.com</a>				
<b>Communication</b>					
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				
<b>Environmental data</b>					
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	11Kg		12Kg		
Cooling system	Natural cooled				
Dimensions (H*L*P)	405mm*314mm*135mm				
Display	LCD				
Warranty	10 years				

\* Typical Dc power is not an absolute maximum rating. Online configurator available on [www.zcsazzurro.com](http://www.zcsazzurro.com) will guide the user on valid and possible configurations

\*\* Possible using current sensor (ZST-ACC-TA)