

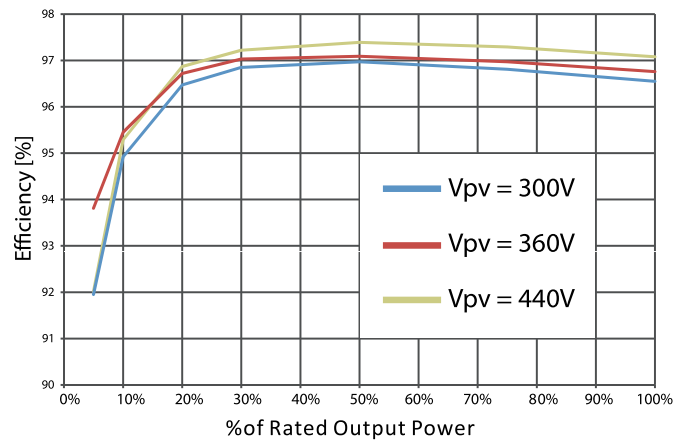
# AZZURRO - SINGLE-PHASE STRING INVERTER LITE SERIES

1PH 1100TL-V3/1PH 1600TL-V3/1PH 2200TL-V3  
1PH 2700TL-V3/1PH 3000TL-V3/1PH 3300TL-V3

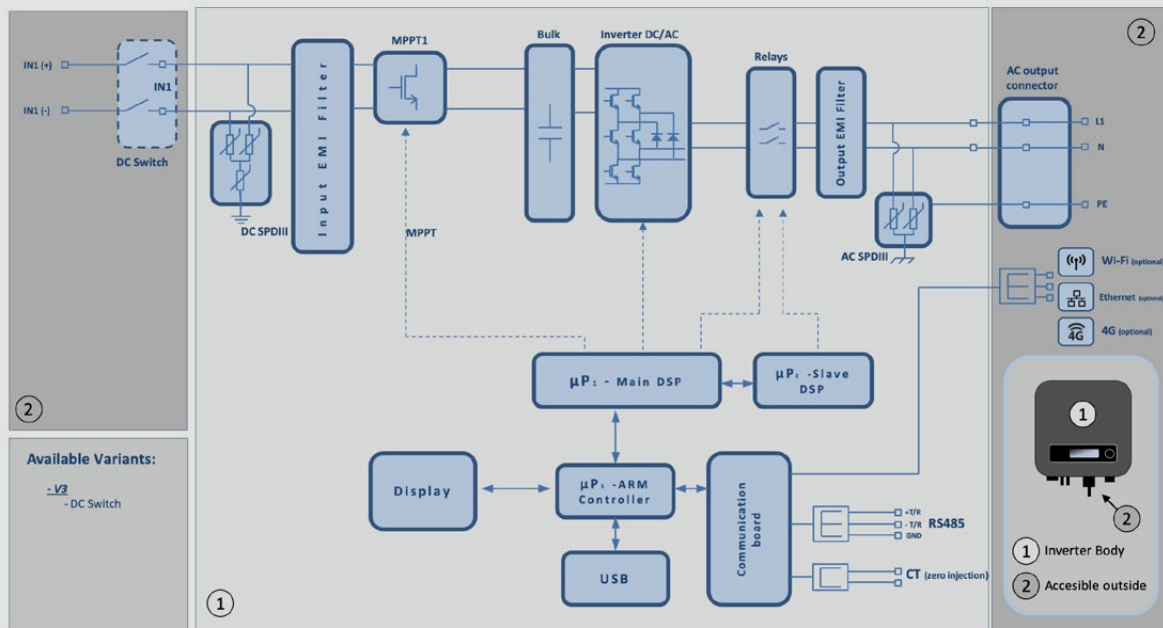


- Maximum performance 97.7%
- Single MPPT channel
- Fast and safe installation with all required parts included
- Ultra-compact
- 5 or 10 year ZCS warranty
- Wide input operating range from 50V to 550V

## EFFICIENCY CURVE



## FLOW CHART



TECHNICAL DATA	1PH 1100TL-V3	1PH 1600TL-V3	1PH 2200TL-V3	1PH 2700TL-V3	1PH 3000TL-V3	1PH 3300TL-V3
<b>DC input</b>						
Typical DC power *	1210W	1760W	2420W	2970W	3300W	3630W
Independent MPPTs/Strings each MPPT	1/1					
Maximum DC voltage	500V			550V		
Start-up voltage	70V					
Nominal DC voltage	360V					
MPPT range in DC	50V-500V			50V-550V		
Full power range in DC	110V-450V	150V-450V	200V-450V	250V-500V	275V-500V	300V-500V
Maximum DC input current each MPPT	12A					
Maximum absolute DC input current each MPPT	15A					
<b>AC output</b>						
Nominal AC Power	1100W	1600W	2200W	2700W	3000W	3300W
Maximum AC Power	1100VA	1600VA	2200VA	2700VA	3000VA	3300VA
Maximum AC current each phase	5.3A	7.7A	10.6A	13A	14.5A	16A
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~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 **					
<b>Efficiency</b>						
Maximum Efficiency	97.5%			97.7%		
Euro efficiency	96.9%			97.2%		
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	Integrated					
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 61000-6-1/3, EN 61000-3-2/3					
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 <a href="http://www.zcsazzurro.com">www.zcsazzurro.com</a>					
<b>Communication</b>						
Interfaces	Wi-Fi/4G/Ethernet (optionals), RS485 (proprietary protocol), USB					
Additional I/O	Current sensor connection input					
<b>Environmental data</b>						
Temperature working range	-30°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	5.5 Kg			6.3 Kg		
Cooling system	Natural cooled					
Dimensions (H*L*P)	303mm*260.5mm*118mm			321mm*260mm*131.5mm		
Display	LCD					
Warranty	5 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)