

## 2.2 String Inverter

The string inverters for feeding grid-connected photovoltaic systems are the one of the best choice for medium-sized systems. Outstanding peak efficiency factors, patented technology and high-quality workmanship make them a reliable choice for permanently high system yields. This is ideally complemented by simple operation and comprehensive warranty and servicing options.

- Maximum efficiency of 97.8% and wide input voltage range
- Internal DC switch
- Transformer less GT topology
- Compact design
- MTL – String



Specifications	1000TL	1500TL	2000TL	3000TL	4000TL	5000TL
Max. DC power	1300W	1800W	2300W	3200W	4200W	5000W/5200W*
Max. DC voltage	450V	450V	500V	500V	580V	580V
Start voltage	90V	150V	150V	150V	150V	150V
PV voltage range	70V-450V	100V-450V	100V-500V	100V-500V	100V-580V	100V-580V
MPP work voltage range/ nominal voltage	70V-450V/180V	120V-450V/360V	120V-500V/360V	120V-500V/360V	120V-580V/360V	120V-580V/360V
Full load dc voltage range	110V-400V	175V-450V	195V-450V	260V-450V	260V-500V	260V-500V
Max. input current	10A	10A	12A	15A	20A	20A
Max. input current per string	10A	10A	12A	15A	20A	20A
Rated AC output power	1000W	1600W	2000W	2850W	3680W	4600W
Max. AC power	1100W	1650W	2200W	3000W	4000W	4600/5000W*
Max. output current	5.5A	8A	11A	15A	16A	22.7A
AC nominal voltage; range	220,230,240V; 180Vac-280Vac					
AC grid frequency; range	50,60Hz; ±5 Hz					
Power factor	1					
THDI	<3%					
AC connection	Single phase					
Max. efficiency	97%	97%	97%	97%	97.80%	97.80%
Euro weighted efficiency	95.50%	96.50%	96.50%	96.50%	97.40%	97.40%
MPPT efficiency	99.50%	99.50%	99.50%	99.50%	99.50%	99.50%
Protection devices	DC reverse polarity protection DC switch rating for each MPPT Output over current protection		Output over voltage protection- varistor Ground fault monitoring		Grid monitoring Integrated all - pole sensitive leakage current monitoring unit	
Dimensions (W / H / D) in mm	360/329/132				406/406/192	
Weight	10.5KG	11.5KG	11.7KG	12.2KG	21KG	21KG
Operating temperature range	-25°C ... +60°C (-13...+140°F) with derating above 50°C /122°F					
Noise emission (typical)	≤ 25 dB(A)					
Altitude	2000m(6560ft) without derating			2000m(6560ft) without derating		
Self-Consumption night	< 0.5 W					
Topology	transformer less					
Cooling concept	Natural					
Environmental Protection Rating	IP65					
Relative humidity	0.95					
DC connection	H4/MC4(opt)					
AC connection	Screw terminal					
Display	LCD					
Interfaces: RS485/RS232/Bluetooth / RF/Zigbee/Wifi	yes/opt					

