Three-Phase String Inverters 4 kW to 10 kW

> Residential, Commercial, Solar Inverters

Evershine TLC Series
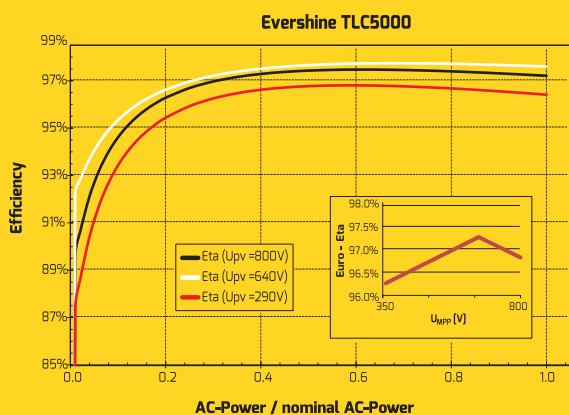### TLC4000/5000/6000/8000/10000

Introduction

We believe that the world would be a better place if everybody had easy access to the cleanest energy from the roof of their homes and businesses. By creating simple, easy to use, affordable and reliable inverters we are revolutionizing access to solar power and delivering financial savings to your home or business. Ideal for large residential or small commercial applications, our Evershine TLC three phase inverter.
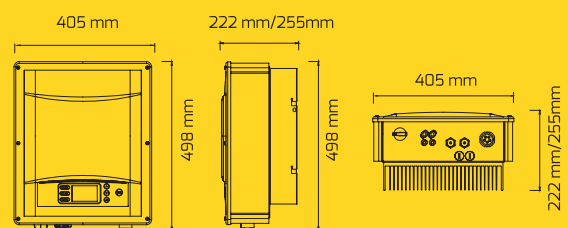
Features

- Efficiency 98.1%
- Max. input voltage 1000V
- Graphical display
- Multiple Maximum Powerpoint Tracking
- IP65 protection class
- RS485 and Modbus RTU communications
- Optional integrated Ethernet and Wi-Fi communication
- Grid management functions via integrated ComBox, ZeverCom, ZeverCom Wi-Fi or ZeverManager
- Easy handling for installation and maintenance

Conversion efficiency

Evershine TLC5000

Legend:
- Eta (Upv =800V)
- Eta (Upv =640V)
- Eta (Upv =290V)

X-axis: AC-Power / nominal AC-Power
Y-axis: Efficiency

Inset: Euro - Eta vs U_{MPP} [V]

Dimensions

405 mm · 222 mm/255mm · 498 mm · 405 mm · 222 mm/255mm

zeversolar

Three-Phase String Inverters 4 kW to 10 kW

Technical data	Evershine TLC4000	Evershine TLC5000	Evershine TLC6000	Evershine TLC8000	Evershine TLC10000
Input (DC)					
DC convertible power (@cosφ=1)	4650W	5800W	6300W	9250W	10500W
Max. input voltage	1000V			1000V	
MPP voltage range / rated input voltage	200–900V / 640V			200–900V / 640V	
Min. start voltage	250V			250V	
Min. feed-in power	12W			12W	
Max. input current per MPPT	11A / 11A			15A / 11A	15A / 11A
Number of MPPTs	2			2	2
Number of independent MPP inputs	1 / 1			2 / 1	2 / 1
Output (AC)					
Rated active power	4000W	5000W	6000W	8000W	10000W
Max. apparent AC power	4400VA	5500VA	6000VA	8800VA	10000VA
Nominal AC voltage	3/N/PE, 220/380V, 230/400V, 240/415V				
Nominal AC voltage range (line to line)	277–485V			277–520V	277–520V
AC power frequency / range	50 / +–5Hz			50 / +–5Hz	50 / +–5Hz
Rated power frequency / rated grid voltage	50Hz / 230V			50Hz / 230V	
Max. output current	3 x 6.8A	3 x 8.5A	3 x 9.2A	3 x 13.3A	3 x 15.1A
Power factor (@rated power)	> 0.99			> 0.99	
Adjustable displacement power factor	0.85 inductive ... 0.85 capacitive			0.85 inductive ... 0.85 capacitive	
Feed-in phases / connection phases	3 / 3			3 / 3	
Harmonic distortion (THD) at rated output	< 3%			< 3%	
Efficiency					
Max. efficiency / European weighted efficiency	98% / 97.5%			98.1% / 97.6%	
MPPT efficiency	99.50%			99.50%	
Protective devices					
DC isolator	○			○	
PV iso / Grid monitoring	● / ●			● / ●	
DC reverse polarity protection / AC short-circuit current capability	● / ●			● / ●	
GFCI function	●			●	
Protection class (according to IEC 62103) / overvoltage category (according to IEC 60664-1)	I / II (DC), III (AC)			I / II (DC), III (AC)	
General data					
Interfaces: RS485 / RS485[1) & Ethernet & Wi-Fi & a.RJ45[2])(DRED)	● /○			● / ○	
Earth Fault Alarm[3)	cloud based, audible and visible			cloud based, audible and visible	
Display	graphical LCD			graphical LCD	
Dimensions (W x H x D)	405 x 498 x 222mm			405 x 498 x 255mm	
Weight	21kg			25kg	
Cooling concept	convection			convection	
Noise emission (typical)	< 40 dB(A)@1m			< 45 dB(A)@1m	
Installation	indoor & outdoor			indoor & outdoor	
Mounting information	wall mounting bracket			wall mounting bracket	
DC connection technology	SUNCLIX			SUNCLIX	
AC connection technology	plug-in			plug-in	
Operating temperature range	-25°C...+60°C / -13°F...+140°F			-25°C...+60°C / -13°F...+140°F	
Relative humidity (non-condensing)	0% ... 100%			0% ... 100%	
Max. operating altitude	2000m			2000m	
Degree of protection (according to IEC 60529)	IP65			IP65	
Climatic category (according to IEC 60721-3-4)	4K4H			4K4H	
Topology	transformerless			transformerless	
Self-consumption (night)	< 0.6W			< 0.6W	
Standby power	< 12W			< 12W	

● standard   ○ optional   – not available
1) 2-pin RS485 for connection to approved smart meters in zero export installations (replacing standard RS485 on RJ 45 connector)
2) Analog RJ45 interface to DRED in Australia & New Zealand
3) Selectable in ZeverCloud; audible alarm will only be activated in AS4777 setting