

Single-Phase String Inverters 3.68 kW to 5 kW

> Residential, Solar Inverters



Evershine TL Series TL3680/5000

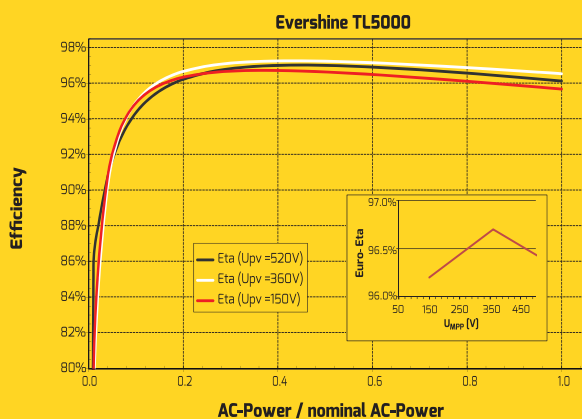
Introduction

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. By creating simple, easy to use, affordable and reliable inverters we are revolutionizing access to solar power and bringing energy to everybody. Ideal for large residential applications, our Evershine TL single phase inverter with simple feed in power and monitoring functions and multiple maximum power point tracking takes the revolution from the streets to the rooftop of your home.

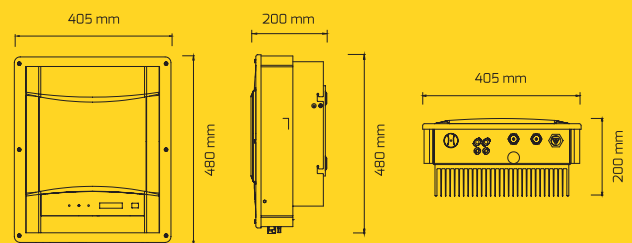
Features

- Efficiency 97.3%
- Multiple Maximum Powerpoint Tracking
- IP65 Protection Class
- RS485 communications
- Online web monitoring via our PMU residential (optional Wifi)
- Grid Management Functions via our PMU residential
- Easy handling for installation and maintenance

Conversion efficiency



Technical data



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Technical data	Evershine TL3680	Evershine TL5000
Input (DC)		
Recommended max. PV array power (@cos=1) ¹⁾	5320W	7420W
DC Convertible power (@cos=1)	3800W	5300W
Suggested PV power ratio ¹⁾	80-140%	
Max. Input Voltage	600V	
MPP Voltage range/rated input voltage	125-520V/360V	
Min. Start voltage	125V	
Min. Feed-in power	10W	
Max. Input current per MPPT	A:15A/B:15A	
Number of MPPTs	2	
Number of independent MPP inputs	1:1	
Output (AC)		
Rated active power**	3680W	5000W ²⁾
Max. Apparent AC power	3680VA	5000VA ²⁾
Nominal AC voltage/range	220,230,240V/180-280V	
AC power frequency/range	50,60/+5Hz	
Rated power frequency/rated grid voltage	50Hz/230V	
Max. Output current	16A	25A
Power factor (@rated power)	1	
Adjustable displacement power factor ²⁾	0.9 inductive ... 0.9 capacitive	
Feed-in phases/connection phases	1/1	
Harmonic distortion (THD) at rated output	< 3%	
Efficiency		
Max. Efficiency/European weighted efficiency	97.1%/96.2%	97.3%/96.5%
MPPT Efficiency	99.90%	99.90%
Protective devices		
DC Isolator	Optional	
PV Iso/Grid monitoring	Yes/Yes	
DC reverse polarity protection/AC short-circuit current capability/galvanically isolated	Yes/Yes/-	
GFCI function	Yes	
Protection class (according to IEC 62103)/overvoltage category (according to IEC 60664-1)	I/II (DC), III (AC)	
General data		
Dimensions (W/H/D)	405 x 480 x 200mm	
Weight	19.5Kg	
Operating temperature range	-25°C...+60°C/13°F...+140°F	
Max. Operating altitude	2000m	
Noise emission (typical)	< 30 dB(A)@1m	
Self-consumption (night)	< 1W	
Standby power (rated voltage)	6W	
Topology	Transformerless	
Cooling concept	Convection	
Degree of protection (according to IEC 60529)	IP65	
Climatic category (according to IEC 60721-3-4)	4K4H	
Installation	Indoor&Outdoor	
Mounting information	Wall mounting bracket	
Relative humidity (non-condensing)	0%~100%	
Features		
DC connection technology	SUNCLIX	
AC connection technology	Plug-in	
Interface: RS485/Ethernet/WIFI	Yes/-/-	
Certificates and approvals (more available on request)	IEC62109-1, IEC62109-2,CE, NEN50438 VDE0126-1-1/AI:2012, VDE0126-1-1:2013,G83/2	CE, IEC62109-1, IEC62109-2, AS/NZ53100, VDE-AR-N 4105, A54777.2, A54777.3, C10/11, UTEK 15-712-1, NEN50438, G59/3, EN50438, VDE0126-1-1/AI:2012, VDE0126-1-1:2013, CN15382

1) Recommended value/range by ZEVERSOLAR for units under various conditions.

It is mandatory to verify and consider the local environmental factors for the system design. Detailed configuration values for individual locations can be obtained from the ZEVERSOLAR planning tool www.zeverplan.com. Alternatively contact your local ZEVERSOLAR provider for assistance.

2) Will be preset based on the different region safety requirements

** Within the scope of the EEG law an active power limitation according to current national EEG is preset, which can be adjusted at any time when connected to a Power Monitoring Unit. (For Germany only)

As of January, 2015 / Technical data is subject to revisions.