

Single-Phase String Inverters 3.68 kW to 5 kW

> Residential, Solar Inverters



Zevelution Series 3680/4000/5000

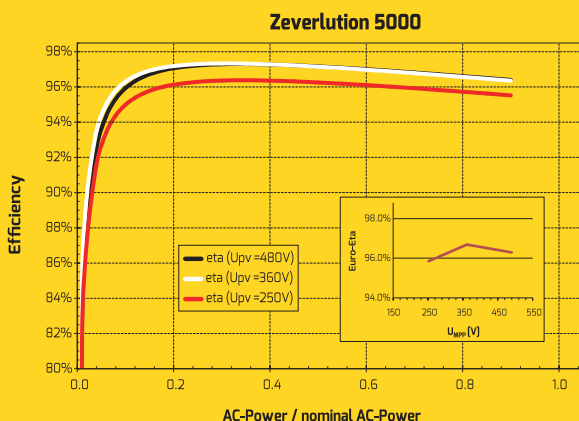
Introduction

The Zevelution inverter generation combines all aspects of our beliefs into simple, reliable and affordable PV inverters. By introducing a patented inverter topology we use less power electronic components for further increased reliability. At the same time we have reduced the weight of the inverter by nearly 40%, making it even simpler to install and use. With an even wider MPPT range you can benefit from maximum power more often. Furthermore integrated monitoring via Ethernet or Wi-Fi communication is available, whenever you want, our Zevelution series.

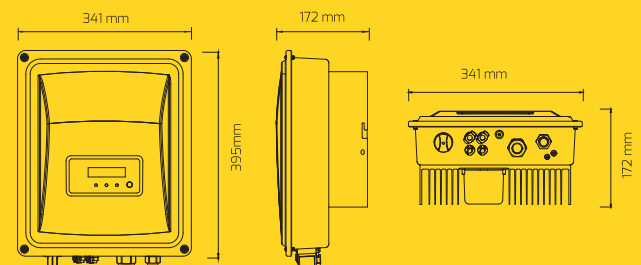
Features

- Dual MPPT for flexible installation
- Lightweight less than 11 kg
- Compact design with IP65 casing for outdoor use
- SUNCLIX connectors for toolless DC wiring
- Quiet with only 25dB noise
- High operating altitude up to 4000m
- Optional and retrofitable integrated Ethernet and Wi-Fi communication
- Support remote firmware update

Conversion efficiency



Dimensions



Single-Phase String Inverters 3.68 kW to 5 kW

Technical data	Zevelution 3680	Zevelution 4000	Zevelution 5000
Input (DC)			
Maximum PV array power (STC)	4780 Wp	5720 Wp	6500 Wp
Maximum DC power at $\cos \phi = 1$	3900W	4650W	5300W
Max. input voltage	600V		
MPP voltage range / rated input voltage	100-520V / 360V		
Min. start voltage	80V		
Min. feed-in power	20W		
Max. input current per MPPT	11A / 11A		
Number of MPPTs	2		
Number of independent MPP inputs	1 / 1		
Output (AC)			
Rated active power	3680W	4000W	5000W ¹⁾
Max. apparent AC power	3680VA	4400VA	5000VA ¹⁾
Nominal AC voltage / range	220V, 230V, 240V / 180V-280V		
AC power frequency / range	50, 60 / ± 5 Hz		
Rated power frequency / rated grid voltage	50Hz / 230V		
Max. output current	16A	20A	23A ²⁾
Power factor (@rated power)	1		
Adjustable displacement power factor	0.8 inductive ... 0.8 capacitive		
Feed-in phases / connection phases	1 / 1		
Harmonic distortion (THD) at rated output	< 3%		
Efficiency			
Max. efficiency / European weighted efficiency	97.2% / 96.5%	97.2% / 96.5%	97.2% / 96.5%
MPPT efficiency	99.50%	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)		
General data			
Interfaces: RS485 / RS485 ³⁾ & Ethernet & Wi-Fi & a.RJ45 ⁴⁾ (DRED)	● / ○		
Earth Fault Alarm ⁵⁾	cloud based, audible and visible		
Display	16 x 2 characters		
Dimensions (W x H x D)	341 x 395 x 172mm		
Weight	11kg		
Cooling concept	convection		
Noise emission (typical)	< 25 dB(A)@1m		
Installation	indoor & outdoor		
Mounting information	wall mounting bracket		
DC connection technology	SUNCLIX		
AC connection technology	screw clamp terminal		
Operating temperature range	-25°C...+60°C / -13°F...+140°F		
Relative humidity (non-condensing)	0% ... 100%		
Max. operating altitude	4000m (>3000m derating)		
Degree of protection (according to IEC 60529)	IP65		
Climatic category (according to IEC 60721-3-4)	4K4H		
Topology	transformerless		
Self-consumption (night)	< 1W		
Standby power	8.5W		

● standard ○ optional - not available

1) Based on the VDE 4105 requirements active power and apparent power will be limited to 4600W and 4600VA

2) 21.7A according to AS/NZS4777.2:2015

3) 2-pin RS485 for connection to approved smart meters in zero export installations (replacing standard RS485 on RJ 45 connector)

4) Analog RJ45 interface to DRED in Australia & New Zealand

5) Selectable in ZevelCloud; audible alarm will only be activated in AS4777 setting

As of January, 2018 / Technical data is subject to revisions.