

# Single-Phase String Inverters 3.68 kW to 5 kW

> Residential, Solar Inverters



## Zeverlution Series 3680/4000/5000

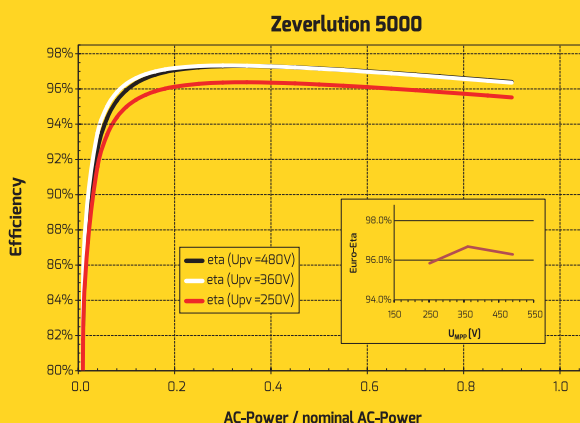
### Introduction

The Zeverlution 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 you can retrofit Ethernet and WiFi communication, whenever you want, our Zeverlution series.

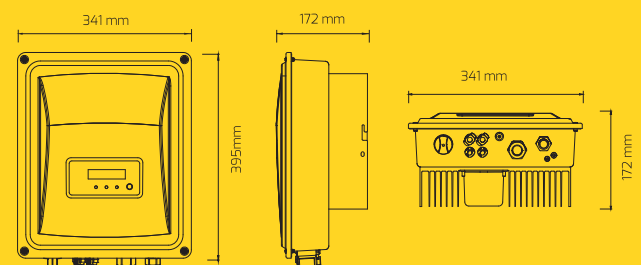
### Features

- 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



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Technical data	Zevelution 3680	Zevelution 4000	Zevelution 5000
<b>Input (DC)</b>			
DC convertible power (@cosφ=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	30W		
Max. input current per MPPT	11A / 11A		
Number of MPPTs	2		
Number of independent MPP inputs	1 / 1		
<b>Output (AC)</b>			
Rated active power	3680W	4000W	5000W <sup>1)</sup>
Max. apparent AC power	3680VA	4400VA	5000VA <sup>1)</sup>
Nominal AC voltage / range	220V, 230V, 240V / 180V-280V		
AC power frequency / range	50, 60 / +5Hz		
Rated power frequency / rated grid voltage	50Hz / 230V		
Max. output current	16A	20A	23A <sup>2)</sup>
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%		
<b>Efficiency</b>			
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%
<b>Protective devices</b>			
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)		
<b>General data</b>			
Interfaces: RS485 / R5485 & ETH & WIFI	● / ○		
Earth Fault Alarm <sup>3)</sup>	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		
Certificates and approvals (more available on request)	CE, G83/1, G83/2, VDE0126-1-1:2006+A1:2012,	CE, VDE0126-1-1:2006+A1:2012, G59/2, G59/3, NB/T 32004	CE, NEN50438:2013, VDE0126-1-1:2006+A1:2012, G59/2, G59/3, BSMI/CNS15382, PEA, MEA, NB/T 32004,

● standard ○ optional - not available

As of April, 2016 / Technical data is subject to revisions.

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

2) Based on VDE4105 the max. AC output current will be limited to 20A

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