

# Single-Phase String Inverters 1 kW to 3 kW

> Residential, Solar Inverters



## Zeverlution Series

1000S / 1500S / 2000S / 3000S

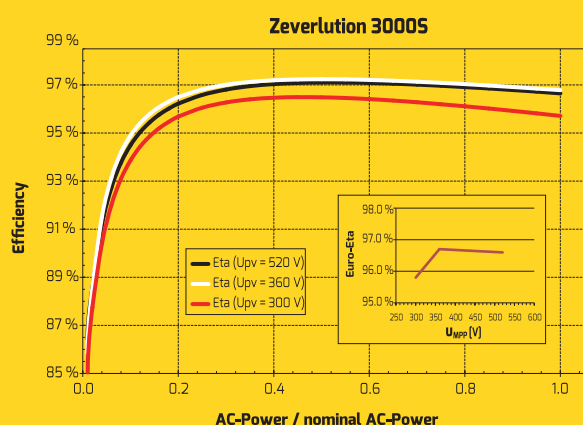
### Introduction

The Zeverlution inverter generation combines all aspects of our beliefs into simple, reliable and affordable PV inverters. By introducing a patented inverter topology we used less power electronic components for further increased reliability. At the same time we have reduced the weight of the inverter by nearly 50 %, making it even simpler to install and use. An increased efficiency of 97.5 % ensures higher generation over the life time of your pv plant. Furthermore, integrated monitoring via Ethernet or Wi-Fi communication is available whenever you want, our Zeverlution series.

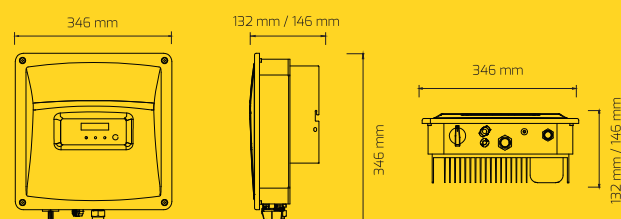
### Features

- Extremely lightweight at only 6.5 kg
- Compact design with IP65 casing for outdoor use
- Plug-in AC connector for easy electrical installation
- SUNCLIX connectors for toolless DC wiring
- Higher power yield with efficiency of 97.5 %
- Extremely quiet at less than 15 dB
- Higher operating altitudes up to 3000 m without derating
- Optional integrated Ethernet and Wi-Fi communication
- Supports remote firmware update

### Conversion efficiency



### Dimensions



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Technical data	Zeverlution 1000S	Zeverlution 1500S	Zeverlution 2000S	Zeverlution 3000S
<b>Input (DC)</b>				
Max. PV array power	1430 Wp STC	2140 Wp STC	2860 Wp STC	3900 Wp STC
Max. input voltage	500 V	500 V	500 V	600 V
MPP voltage range / rated input voltage	70 V to 450 V / 360 V	70 V to 450 V / 360 V	70 V to 450 V / 360 V	70 V to 520 V / 360 V
Min. input voltage	70 V	70 V	70 V	70 V
Initial feed-in voltage	90 V	90 V	90 V	150 V
Max. operating input current per MPPT	11A			
Max. short circuit current per MPPT / per string input	16.5 A / 16.5 A			
Number of independent MPPT inputs / strings per MPPT input	1 / 1			
<b>Output (AC)</b>				
Rated power	1000 W	1500 W	2000 W	3000 W
Max. apparent AC power	1100 VA	1650 VA	2200 VA	3000 VA
AC nominal voltage	220 V / 230 V / 240 V			
AC voltage range	180 V to 280 V			
AC grid frequency / range	50 Hz / 45 Hz to 55 Hz 60 Hz / 55 Hz to 65 Hz			
Rated grid frequency / rated grid voltage	50 Hz / 230 V			
Max. output current	5.5 A	7.5 A	10 A	15 A
Power factor at rated power	1			
Adjustable displacement power factor	0.8 overexcited to 0.8 underexcited			
Feed-in phases	1			
Harmonic distortion (THD) at rated output	< 3 %			
<b>Efficiency</b>				
Max. efficiency / European efficiency	97 % / 96.3 %	97.2 % / 96.5 %	97.3 % / 96.7 %	97.5 % / 97 %
<b>Protective devices</b>				
Input-side disconnection device	•			
Ground fault monitoring / grid monitoring	• / •			
DC reverse polarity protection / AC short circuit current capability	• / •			
All-pole-sensitive residual-current monitoring unit	•			
Protection class (according to IEC 62109-1) / overvoltage category (according to IEC 62109-1)	I / AC : III ; DC : II			
<b>General data</b>				
Dimensions (W / H / D)	346 / 346 / 132 mm	346 / 346 / 132 mm	346 / 346 / 132 mm	346 / 346 / 146 mm
Weight	6.5 kg	6.5 kg	6.5 kg	6.8 kg
Operating temperature range	-25 °C to +60 °C			
Noise emission (typical)	< 15 dB(A)			
Self-consumption (at night)	< 1 W			
Topology	Transformerless			
Cooling concept	Convection			
Degree of protection (according to IEC 60529)	IP65			
Climatic category (according to IEC 60721-3-4)	4K4H			
Max. permissible value for relative humidity (non-condensing)	100 %			
Max. operating altitude	4000 m (>3000m derating)			
<b>Features</b>				
DC connection	SUNCLIX			
AC connection	Plug-in connector			
Mounting type	Wall mounting bracket			
Display	16 x 2 characters LCD			
LED Indicators (Status / Fault / Communication)	•			
Interface: RS485 / WLAN & Ethernet <sup>1) &amp; 2)</sup>	○ / ○			
Certificates and approvals (more available on request)	CE, EN50438, G83/2, VDE-0126, VDE-AR-N4105, AS/NZS 4777, C10/C11, VFR 2014 & UTE C15, TOR D4 V2, CNS15382, IEC62109, IEC62116, IEC61727, IEC61683, IEC60068			
Type designation	Zeverlution 1000S	Zeverlution 1500S	Zeverlution 2000S	Zeverlution 3000S

• standard ○ optional - not available

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

1) Zero export installations supported with 2-pin RS485 for connection to approved smart meters

2) DRED supported with analog RJ45 interface for Australia & New Zealand