

Three-Phase String Inverter 33 kW

> Commercial, Industrial, Solar Inverter



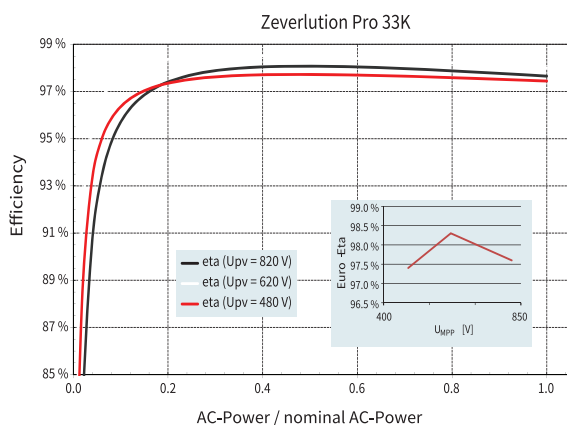
Zevelution Pro 33K

Introduction

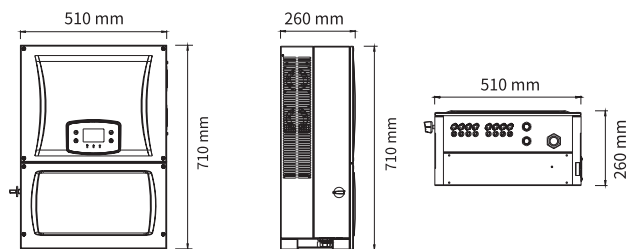
We believe that the world would be a better place if everybody had easy access to the cleanest energy. Now we are also revolutionizing access to solar power for multi-MW utility grade PV plants. You will benefit from highest efficiency, lowest start voltage, wide MPPT range and Modbus support. Because great plants are not made with powerful words alone, our Zevelution Pro series.

Features

- Efficiency up to 98.5 %
- Lightweight, only 58 kg
- Compact IP65 casing ideal for PV plants
- Integrated DC and AC surge protection for highest safety
- RS485 and Modbus RTU communications
- Separate wiring compartment for convenient and reliable installation
- Complete grid and plant management functions via ZeverManager, ZeverCom or Modbus-compliant 3rd party management devices
- Easy handling for installation and maintenance



Dimensions



Three-Phase String Inverter 33 kW

Technical data	Zeverlution Pro 33K
Input (DC)	
Max. PV array power	49500 Wp STC
Max. input voltage	1000 V
MPP voltage range / rated input voltage	270 V to 950 V / 620 V
Min. input voltage	250 V
Initial feed-in voltage	300 V
Max. operating input current per MPPT input A / input B	34 A / 34 A
Max. input current per string input A / input B	12 A / 12 A
Number of independent MPPT inputs / strings per MPPT input	2 / A: 4; B: 4
Output (AC)	
Rated power	33000 W ¹⁾
Max. apparent AC power	33000 VA
AC nominal voltage	220 V / 380 V 230 V / 400 V 240 V / 415 V
AC voltage range	160 V to 300 V
AC grid frequency / range	50 Hz / 45 Hz to 55 Hz 60 Hz / 55 Hz to 65 Hz
Rated power frequency / rated grid voltage	50 Hz / 230 V
Max. output current / rated output current	3 x 48 A / 3 x 48 A
Power factor at rated power / adjustable displacement power factor	1 / 0.80 overexcited to 0.80 underexcited
Feed-in phases / AC connection	3 / 3-N-PE
Harmonic distortion (THD) at rated output	< 3 %
Efficiency	
Max. efficiency / European efficiency	98.5 % / 98.2 %
Protective devices	
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)	●
DC surge arrester (Type II)	●
AC surge protection	●
General data	
Dimensions (W / H / D)	510 / 710 / 260 mm
Weight	58 kg
Operating temperature range	-25 °C to +60 °C
Noise emission (typical)	< 60 dB(A)
Self-consumption (at night)	< 1 W
Topology	Transformerless
Cooling concept	Fan cooling
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	2000 m
Features	
DC connection	SUNCLIX
AC connection	Screw terminals
Mounting type	Wall mounting bracket
Display	Graphical LCD
LED Indicators (Status / Fault / Communication)	●
Interface: RS485 / WLAN & Ethernet	● / -
Data interfaces: Zegersolar Modbus	●
Certificates and approvals (more available on request)	CE, IEC 62109-1/2, VDE-ARN 4105, VDE 0126-1-1, C10/11:2012, UTE C15-712-1, EN50438:2013, NEN EN 50438, G59/3, RD 1699/413, IEC 60068, IEC 61727, IEC 62116, NB/T32004-2013
Type designation	Zeverlution Pro 33K

● standard ○ optional - not available

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

1) At 230Vac rated condition