

# blueplanet 29.0 TL3 LV

Transformerless, three-phase string inverter.



## Up with economy, down with costs.

Input voltage up to 1100 V for flexibility and safety in the DC design

Large cable cross-sections possible for copper and aluminium cables

Compact and lightweight for wall mounting

Cost-saving DC and AC input configurations

Wide MPP range for flexible string design

Adjustable cos phi from 0.3 ind. to 0.3 cap. for special reactive power requirements

Up to 150 % inverter oversizing possible

Made in Germany

## Technical Data

DC input data		29.0 TL3 LV
Max. recommended PV generator power		43 500 W
MPP range		360 – 900 V
Operating range		360 – 1050 V
Rated DC voltage / start voltage		410 V / 460 V
Max. no-load voltage		1 100 V
Max. input current		85 A
Max. short circuit current $I_{sc\ max}$		190 A
Number of MPP tracker		1
Connection per tracker		S / B / M : 1; XL: 6
AC output data		
Rated output		29 000 VA @ 138 V / 240 V 29 000 VA @ 127 V / 220 V 27 500 VA @ 120 V / 208 V
Max. power		30 100 VA
Line voltage		138 V / 240 V (3 / N / PE; 3 / PEN) 127 V / 220 V (3 / N / PE; 3 / PEN) 120 V / 208 V (3 / N / PE; 3 / PEN)
Voltage range (Ph-Ph)		166 - 346 V
Rated frequency (range)		50 Hz / 60 Hz (42 - 68 Hz)
Rated current		3 x 69.8 A @ 240 V 3 x 76.1 A @ 220 V 3 x 76.5 A @ 208 V
Max. current		3 x 76.5 A
Reactive power / cos phi		0 – 100 % Snom / 0.30 ind. – 0.30 cap.
Max. total harmonic distortion (THD)		1.6 %
Number of grid phases		3
General data		
Max. efficiency		97.3 %
Europ. efficiency		96.9 %
CEC efficiency		97.0 %
Standby consumption		2.5 W
Circuitry topology		transformerless
Mechanical data		
Display		graphical display + LEDs
Control units		4-way navigation + 2 buttons
Interfaces		Ethernet, USB, RS485, optional: 4-DI
Fault signalling relay		potential-free NOC max. 30 V / 1 A
DC connection		S / B / M: max.120 mm <sup>2</sup> cable plug, Cu / Al XL: DC plugs (SUNCLIX)
AC connection		screw terminals, max. 95 mm <sup>2</sup> , Cu / Al
Ambient temperature		-20 °C – +60 °C <sup>1)</sup>
Humidity		0 – 100%
Max. installation elevation (above MSL)		3 000 m
Min. distance from coast		2 000 m / 500 m (OD+ version)
Cooling		temperature controlled fan
Protection class		IP65
Noise emission		< 61 db(A)
H x W x D		760 x 500 x 425 mm
Weight		70 kg (S), 71 kg (B / M), 73 kg (XL)
Certifications		
Safety		IEC 62109-1/-2, EN 61000-6-1/-2/-3, EN 61000-3-11/-12
Grid connection rule		overview see homepage / download area

<sup>1)</sup> Power derating at high ambient temperatures

Versions	S	B	M	XL
Number of DC inputs	1	1	1	6
DC switch	-	✓	✓	✓
Fuse holder PV+ without fuse	-	-	-	✓
String protection PV -	-	-	○	○
DC surge protection	-	-	○	Type 1 + 2
AC surge protection	-	-	○	○
OD+	★	★	★	★

standard = ✓ upgradeable = ○ optional = ★