

# blueplanet 125 - 150 TL3

String inverters for utility-scale solar power plants  
up to multi-megawatt solar parks.



## Decentrally into new dimensions.

Superior efficiencies and  
overload capacity through  
silicon carbide technology

Special properties for extreme  
environmental conditions

Decentralised design or ‚Virtual  
Central‘ concept possible

Overvoltage protection AC/  
DC and for communication  
interfaces available

Lean commissioning and updates  
via remote services

## Technical Data

DC input data	125 TL3	137 TL3
Max. recommended PV generator power	187 500 W	205 500 W
MPP range	875 – 1 300 V	875 – 1 300 V
Operating range	875 – 1 450 V	875 – 1 450 V
Rated DC voltage / start voltage	900 V / 1 000 V	900 V / 1 000 V
Max. no-load voltage	1 500 V	1 500 V
Max. input current	160 A	160 A
Max. short circuit current $I_{sc,max}$	300 A	300 A
Number of MPP tracker	1	1
Connection per tracker	1 - 2	1 - 2
AC output data		
Rated output	125 000 VA	137 000 VA
Max. power	137 500 VA	137 500 VA
Line voltage	600 V (3P+PE)	600 V (3P+PE)
Voltage range (Ph-Ph)	480 – 690 V	480 – 690 V
Rated frequency (range)	50 Hz / 60 Hz (45 – 65 Hz)	50 Hz / 60 Hz (45 – 65 Hz)
Rated current	3 x 120,3 A	3 x 132,3 A
Max. current	3 x 132,3 A	3 x 132,3 A
Reactive power / cos phi	0 – 100 % Snom / 0,30 ind. – 0,30 cap.	
Max. total harmonic distortion (THD)	≤ 3 %	≤ 3 %
Number of grid phases	3	3
General data		
Max. efficiency	99,2 %	99,2 %
Europ. efficiency	99,0 %	99,0 %
CEC efficiency	98,9 %	98,9 %
Standby consumption	6 W	6 W
Circuitry topology	transformerless	transformerless
Mechanical data		
Display	LEDs	LEDs
Control units	webserver, supports mobile devices	
Interfaces	Ethernet (Modbus TCP, Sunspec), RS485 (KACO-protocol) USB, optional: 4-DI, WIFI	
Fault signalling relay	potential-free NOC max. 30 V / 1 A	potential-free NOC max. 30 V / 1 A
DC connection	cable lug, max. 240 mm <sup>2</sup> (0.372 in <sup>2</sup> ) Cu or Al	
AC connection	cable lug, max. 240 mm <sup>2</sup> (0.372 in <sup>2</sup> ) Cu or Al	
Ambient temperature	-25 °C – +60 °C <sup>1)</sup>	-25 °C – +60 °C <sup>1)</sup>
Humidity	0 – 100 %	0 – 100 %
Max. installation elevation (above MSL)	3 000 m	3 000 m
Min. distance from coast	500 m	500 m
Cooling	temperature controlled fan	temperature controlled fan
Protection class	IP66 / NEMA 4X	IP66 / NEMA 4X
Noise emission	59.2 db (A)	59.2 db (A)
H x W x D	719 x 699 x 460 mm	719 x 699 x 460 mm
Weight	78.2 kg	78.2 kg
Certifications	IEC 62109-1/-2, EN 61000-6-1/-2/-4, EN 61000-3-11/-12, EN 55011 group 1, class A EN 62920 Emission class A/Immunity class A UL62109-1, UL1741, CSA-C22.2 No.107.1 CSA-C22.2 No.62109-1, CSA-C22.2 No.62109-2	
Safety	overview see homepage / download area	
Grid connection rule	overview see homepage / download area	

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

Versions	S	XL
Number of DC inputs	1 - 2	1 - 2
DC switch	-	✓
DC SPD	Type 1 + 2	Type 1 + 2
AC SPD	○	○
RS485 interface SPD	○	○
Ethernet interface SPD	○	○
PID Set	○	○

standard = ✓ upgradeable = ○

## Technical Data

DC input data		150 TL3
Max. recommended PV generator power		225 000 W
MPP range		960 – 1 300 V
Operating range		960 – 1 450 V
Rated DC voltage / start voltage		1 000 V / 1 100 V
Max. no-load voltage		1 500 V
Max. input current		160 A
Max. short circuit current $I_{sc,max}$		300 A
Number of MPP tracker		1
Connection per tracker		1 - 2
AC output data		
Rated output		150 000 VA
Max. power		150 000 VA
Line voltage		660 V (3P+PE)
Voltage range (Ph-Ph)		480 – 760 V
Rated frequency (range)		50 Hz / 60 Hz (45 – 65 Hz)
Rated current		3 x 131.2 A
Max. current		3 x 132.3 A
Reactive power / cos phi		0 – 100 % Snom / 0.30 ind. – 0.30 cap.
Max. total harmonic distortion (THD)		≤ 3 %
Number of grid phases		3
General data		
Max. efficiency		99.2 %
Europ. efficiency		99.0 %
CEC efficiency		98.9 %
Standby consumption		7 W
Circuitry topology		transformerless
Mechanical data		
Display		LEDs
Control units		webserver, supports mobile devices
Interfaces		Ethernet (Modbus TCP, Sunspec), RS485 (KACO-protocol) USB, optional: 4-DI, WIFI
Fault signalling relay		potential-free NOC max. 30 V / 1 A
DC connection		cable lug, max. 240 mm <sup>2</sup> (0.372 in <sup>2</sup> ) Cu or Al
AC connection		cable lug, max. 240 mm <sup>2</sup> (0.372 in <sup>2</sup> ) Cu or Al
Ambient temperature		-25 °C – +60 °C <sup>1)</sup>
Humidity		0 – 100 %
Max. installation elevation (above MSL)		3 000 m
Min. distance from coast		500 m
Cooling		temperature controlled fan
Protection class		IP66 / NEMA 4X
Noise emission		59.2 db (A)
H x W x D		719 x 699 x 460 mm
Weight		78.2 kg
Certifications		
Safety		IEC 62109-1/-2, EN 61000-6-1/-2/-4, EN 61000-3-11/-12, EN 55011 group 1, class A EN 62920 Emission class A/Immunity class A UL62109-1, UL1741, CSA-C22.2 No.107.1 CSA-C22.2 No.62109-1, CSA-C22.2 No.62109-2
Grid connection rule		overview see homepage / download area

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Versions	S	XL
Number of DC inputs	1 - 2	1 - 2
DC switch	-	✓
DC SPD	Type 1 + 2	Type 1 + 2
AC SPD	○	○
RS485 interface SPD	○	○
Ethernet interface SPD	○	○
PID Set	○	○

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