

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	< 10 W	< 10 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	
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 ² (0.372 in ²) Cu or Al	
AC connection	cable lug, max. 240 mm ² (0.372 in ²) Cu or Al	
Ambient temperature	-25 °C – +60 °C ¹⁾	-25 °C – +60 °C ¹⁾
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		
Grid connection rule	overview see homepage / download area	

¹⁾ 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		99.0 %
Standby consumption		< 10 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
Fault signalling relay		potential-free NOC max. 30 V / 1 A
DC connection		cable lug, max. 240 mm ² (0.372 in ²) Cu or Al
AC connection		cable lug, max. 240 mm ² (0.372 in ²) Cu or Al
Ambient temperature		-25 °C – +60 °C ¹⁾
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
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Ethernet interface SPD	○	○
PID Set	○	○

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