

blueplanet 110 TL3

Transformerless, three-phase string inverter

The trendsetter among inverters



- 480Vac with Dual 1000V/1500Vdc
- Extensive grid management functions
- Special properties for extreme climatic conditions
- Farsighted technical features for future requirements
- Lean commissioning and maintenance via remote services
- Greater than 99% efficiency with Silicon Carbide technology
- Made in Germany
- Thousands of units installed worldwide

Technical Data

DC input data	110 TL3
Max. recommended PV generator power	165 000 W
MPP range	705 – 1300 V
Operating range	705 – 1450 V
Rated DC voltage / start voltage	730 V / 805 V
Max. no-load voltage	1500 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	110 TL3
Rated output	110 000 VA
Max. power	110 000 VA
Line voltage	480 V (3P+PE)
Voltage range (Ph-Ph)	300 – 580 V
Rated frequency (range)	50 Hz / 60 Hz (45 – 65 Hz)
Rated current	3 x 132,3 A
Max. current	3 x 132,3 A
Reactive power / cos phi	0 – 100 % S_{nom} / 0,30 ind. – 0,30 cap.
Max. total harmonic distortion (THD)	≤ 3 %
Number of grid phases	3

General data	110 TL3
Max. efficiency	99.2 %
Europ. efficiency	99.1 %
CEC efficiency	98.5 %
Standby consumption	< 10 W
Circuitry topology	transformerless
Mechanical data	110 TL3
Display	LEDs
Control units	webserver, supports mobile devices
Interfaces	Ethernet (Modbus TCP, Sunspec) RS485 (Modbus RTU, Sunspec, 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 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 450 mm
Weight	78.2 kg
Certifications	110 TL3
Safety	UL62109-1, UL1741 SA, CSA-C22.2 No. 62109-1, CSA-C22.2 No. 62109-2, CSA-C22.2 No. 107.1 IEC 62109-1/-2, EN 61000-6-1/-2/-3, EN 61000-3-11/-12
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 = ○

Published by Siemens Industry, Inc. 2020

Siemens Industry, Inc.
3617 Parkway Ln.
Peachtree Corners, GA 30092

For more information, including service or parts,
please contact our Customer Support Center.
Phone: +1 (800) 333-7421

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Article No. SIDS-T40054-00-4AUS
Printed in USA
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