

blueplanet 105 TL3

String inverter for commercial and industrial PV systems.



Well-combined.

Cost-saving due to 400 V line voltage and integrated section switches

Optimised for PV modules with 1000 V and 1500 V

Highest efficiency and overload capacity through silicon carbide technology

High power density for easy handling and logistics

Lean commissioning and updates via remote services

Decentralised design or 'Virtual Central' concept possible



Technical Data

DC input data		105 TL3
Max. recommended PV generator power		157 500 W
MPP range		580 – 1 300 V
Operating range		591 – 1 450 V
Rated DC voltage / start voltage		620 V / 675 V
Max. no-load voltage		1 500 V
Max. input current		183 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		99 900 VA
Max. power		105 000 VA
Line voltage		400 V (3P+PE)
Voltage range (Ph-Ph)		300 – 478 V
Rated frequency (range)		50 Hz / 60 Hz (45 – 65 Hz)
Rated current		3 x 144.5 A
Max. current		3 x 152 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		
Max. efficiency		98.9 %
Europ. efficiency		98.6 %
CEC efficiency		98.5 %
Standby consumption		5 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
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
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 = ○