

# 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

| <b>DC input data</b>                    |  | <b>105 TL3</b>   |
|---|--|--|
| Max. recommended PV generator power     |  | 157 500 W  |
| MPP range                               |  | 591 – 1 300 V  |
| Operating range                         |  | 563 – 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  |
| <b>AC output data</b>                   |  |  |
| Rated output                            |  | 99 900 VA  |
| Max. power                              |  | 105 000 VA   |
| Line voltage                            |  | 380 V (3P+PE)<br>400 V (3P+PE)<br>415 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 152.0 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  |
| <b>General data</b>                     |  |  |
| Max. efficiency                         |  | 98.9 %   |
| Europ. efficiency                       |  | 98.6 %   |
| CEC efficiency                          |  | 98.5 %   |
| Standby consumption                     |  | < 10 W   |
| Circuitry topology                      |  | transformerless  |
| <b>Mechanical data</b>                  |  |  |
| 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 <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  |
| <b>Certifications</b>                   |  |  |
| Safety                                  |  | IEC 62109-1/-2, EN 61000-6-1/-2/ 4,<br>EN 61000-3-11/-12,<br>EN 55011 group 1, class A<br>EN 62920 Emission class A/Immunity class A |
| 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 = ○