

# blueplanet 15.0 + 20.0 TL3

Transformerless, three-phase string inverters.



## The all-rounders among inverters.

High flexibility for demanding system designs and string configurations

Manifold safety functions

Installation-friendly connection area, user-friendly operation

Numerous standard interfaces for extensive communication options

Internal storage of log data, no separate data logger required

OD+ version against salt corrosion in coastal areas

## Technical Data

| DC input data                            | 15.0 TL3   | 20.0 TL3   |
|--|--|--|
| Max. recommended PV generator            | 18 000 W   | 24 000 W   |
| MPP range                                | 420 – 800 V  | 515 – 800 V  |
| Operating range                          | 200 – 950 V  | 200 – 950 V  |
| Rated DC voltage / start voltage         | 673 / 250 V  | 673 / 250 V  |
| Max. no-load voltage                     | 1 000 V  | 1 000 V  |
| Max. input current                       | 2 x 20 A   | 2 x 20 A   |
| Max. short circuit current $I_{sc\ max}$ | 2 x 32 A   | 2 x 32 A   |
| Number of MPP tracker                    | 2  | 2  |
| Connection per tracker                   | 2  | 2  |
| Max. input power per tracker             | 15 000 W   | 15 000 W   |
| AC output data                           |  |  |
| Rated output                             | 15 000 VA  | 20 000 VA  |
| Max. power                               | 15 600 VA  | 20 800 VA  |
| Line voltage                             | 240 V / 415 V (3 / N / PE)<br>230 V / 400 V (3 / N / PE)<br>220 V / 380 V (3 / N / PE) | 277 V / 480 V (3 / N / PE)<br>240 V / 415 V (3 / N / PE)<br>230 V / 400 V (3 / N / PE)<br>220 V / 380 V (3 / N / PE) |
| Voltage range (Ph-Ph)                    | 305 – 480 V  | 305 – 480 V  |
| Rated frequency (range)                  | 50 Hz / 60 Hz (42 – 68 Hz)   | 50 Hz / 60 Hz (42 – 68 Hz)   |
| Rated current                            | 3 x 20.9 A @ 415 V<br>3 x 21.7 A @ 400 V<br>3 x 22.8 A @ 380 V                         | 3 x 24.1 A @ 480 V<br>3 x 27.9 A @ 415 V<br>3 x 28.9 A @ 400 V<br>3 x 30.4 A @ 380 V                                 |
| Max. current                             | 3 x 23.0 A   | 3 x 31.0 A   |
| Reactive power / cos phi                 | 0 – 100 % Snom / 0.30 ind. – 0.30 cap.   | 0 – 100 % Snom / 0.30 ind. – 0.30 cap.   |
| Max. total harmonic distortion (THD)     | 0.7 %  | 0.5 %  |
| Number of grid phases                    | 3  | 3  |
| General data                             |  |  |
| Max. efficiency                          | 98.0 %   | 98.4 %   |
| Europ. efficiency                        | 97.6 %   | 98.1 %   |
| CEC efficiency                           | 97.6 %   | 98.1 %   |
| Standby consumption                      | 1.5 W  | 1.5 W  |
| Circuitry topology                       | transformerless  | transformerless  |
| Mechanical data                          |  |  |
| Display                                  | graphical display + LEDs   | graphical display + LEDs   |
| Control units                            | 4-way navigation + 2 buttons   | 4-way navigation + 2 buttons   |
| Interfaces                               | Ethernet, USB, RS485, optional: 4-DI   | Ethernet, USB, RS485, optional: 4-DI   |
| Fault signalling relay                   | potential-free NOC max. 30 V / 1 A   | potential-free NOC max. 30 V / 1 A   |
| DC connection                            | DC plugs (MC4)   | DC plugs (MC4)   |
| AC connection                            | spring-loaded terminal, max. 16 mm <sup>2</sup>  | spring-loaded terminal, max. 16 mm <sup>2</sup>  |
| Ambient temperature                      | -25 °C – +60 °C <sup>1)</sup>  | -25 °C – +60 °C <sup>1)</sup>  |
| Humidity                                 | 0 – 95 %   | 0 – 95 %   |
| Max. installation elevation (above MSL)  | 2 000 m  | 2 000 m  |
| Min. distance from coast                 | 2 000 m / 500 m (OD+ version)  | 2 000 m / 500 m (OD+ version)  |
| Cooling                                  | temperature controlled fan   | temperature controlled fan   |
| Protection class                         | IP65   | IP65   |
| Noise emission                           | < 52 db (A)  | < 53 db (A)  |
| H x W x D                                | 690 x 420 x 200 mm   | 690 x 420 x 200 mm   |
| Weight                                   | 48 kg  | 48 kg  |
| Certifications                           |  |  |
| Safety                                   | EN 62109-1 / -2, EN 61000-6-1 / -2 / -3, EN 61000-3-2 / -3 / -11 / -12                 |  |
| Grid connection rule                     | overview see homepage / download area  |  |

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

| Versions            | 15.0 TL3 | 20.0 TL3 |
|---------------------|----------|----------|
| DC switch           | ✓        | ✓        |
| DC surge protection | ○        | ○        |
| OD+                 | ★        | ★        |

standard = ✓ upgradeable = ○ optional = ★