



Data sheet
blueplanet
gridsave 120 TL3

Outstanding performance for round-the-clock energy.

The bidirectional battery inverter blueplanet gridsave 120 TL3.

With the blueplanet gridsave 120 TL3 (formerly bluestorage 120 TL3), we have developed a radically new product, offering an exceptionally high power rating: 120 kW for both charging batteries and feeding into the local grid in three phases.

This bidirectional battery inverter is perfectly at home with any kind of AC source, as well as with all modern battery systems. It operates quickly and efficiently at an exceptionally high efficiency level of approximately 98%.

When connected to energy sources with fluctuating power, such as a PV system, the blueplanet gridsave 120 TL3 makes it possible to move large quantities of electricity from peak supply times to later periods. Given such features, it comes in a highly compact design.

Its unparalleled features make the blueplanet gridsave 120 TL3 the ideal partner for providing decentralised energy supplies, from larger residential areas right up to entire districts or to facilities with consistently high energy demands.

It is also the perfect choice for industrial settings, where it maximises the commercial self-use of solar power. Essentially, it holds the key to use as much of the power generated on site as possible. As a key component of a peak shaving system, it lowers the connected load rating and saves money from the very first day.

In local networks, the blueplanet gridsave 120 TL3 enables a higher level of photovoltaic penetration and affords the operators greater planning security. Consolidation of the load and generation

profiles keeps the cost of grid expansion to a minimum.

The blueplanet gridsave 120 TL3 was awarded the 2013 SEMIKRON Innovation Award for the "Innovative power electronics for the next generation village energy supply" concept.

The blueplanet gridsave 120 TL3 is manufactured to order. Please contact sales@kaco-newenergy.de to tell us about your project requirements.



blueplanet gridsave 120 TL3

Maximization of own consumption

Continuation of solar electricity supply

High degree of efficiency

Extremely compact

Flexible battery interface

Electrical data	blueplanet gridsave 120 TL3	blueplanet gridsave 120 TL3 + ADStec Batterie
Battery connection side		
Maximum battery system voltage	2 x 492 V (power derating at high voltages possible)	
Minimum battery system voltage	2 x 385 V	2 x 385 V
Battery system topology	two strings with mid-point grounding ¹⁾	
Maximum battery current	195 A	According to battery system
Supplied battery	--	ads-tec SRS
Grid connection side		
Nominal power (@230 V)	120 kW	According to battery system, max. 120 kW
Grid voltage	400 V / 230 V (3 / N / PE) (+/- 10 %)	
Rated current	175 A	175 A
Rated frequency	50 Hz	50 Hz
Maximum grid current	195 A	195 A
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General electrical data		
Max. efficiency inverter	97.8 %	
Internal standby consumption inverter	< 40 W	
Internal battery-side switch	three-pole contactor	
Integrated grid-side switch	four-pole contactor	
Off-grid operation	not available	
Inverter control	via external signed set-point values	
Grid monitoring	via integrated Powador Protect (VDE-AR-N 4105)	
Mechanical data		
Display	graphical display + LEDs	LEDs
Control units	4-way navigation + 2 buttons	Keyswitch
Power connecting DC side (DC+, N, DC)	Cabel lug M8	
Power connecting AC side (L1-L3, N, PE)	Cabel lug M8	
Interfaces, control	RS485	Ethernet
Ambient temperature	0° C ... +40° C ²⁾	10° C ... +30° C ^{2) 3)}
Cooling	forced cooling	forced cooling ³⁾
Protection class	IP21	IP20 ³⁾
H x W x D	1360 x 840 x 355 mm	According to system
Weight	< 250 kg	According to system

¹⁾ The battery system consists of two battery strings connected in series with mid-point grounding.
²⁾ Power derating possible. ³⁾ Depending of system version, other values possible.

Additional hints:

Control of inverter by external, signed set point default

- operating condition
- set point AC power

IU charging curve, defined by (charging curve will be default by direct communication with battery system):

- max. charging current
- max. discharging current
- charging end voltage
- discharging end voltage