SOLAR ELECTRIC

KOSTAL

PLENTICORE BI 25 G3

Batterie inverter - G3 25 kW



Data sheet

PLENTICORE BI 25 G3: The original. New thought!

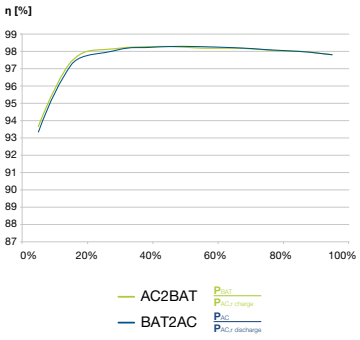
All-In-One

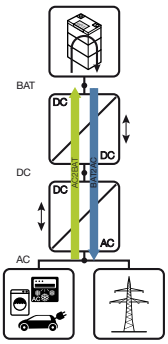
- Compatible with various high-voltage batteries [1)]
- Application range from single-family homes to commercial buildings
- Ideal for retrofitting existing PV systems
- Flexible configuration thanks to 3 DC connections
- Backup power capable (backup function) with external transfer switch
- Charging rate of >1C possible (depending on the battery storage system used)

Easy to install

- Easy device configuration with commissioning assistant via display, smartphone (web browser), or KOSTAL Solar App
- Safe installation thanks to clearly arranged, separate connection compartment with push-in terminals and protected power electronics
- Always up to date with the latest software thanks to AutoUpdate







Smart performance

- Low conversion losses thanks to high-voltage battery
- Battery charging from various AC energy sources [2)]
- Flexibly scalable through the connection of battery storage systems from 5–230 kWh
- Peak shaving (short-term and rapid reduction of load peaks)[2)]
- Time-controlled battery management – charging/ discharging when electricity prices are low/high [2)]

Smart connected

- Control interfaces integrated as standard
- EEBus with LPC and MPC
- Digital inputs for power limitation in accordance with Section 14a EnWG
- Display, data logger, and system monitoring
- Free solar portal and KOSTAL Solar App for monitoring the PV system
- Modbus/SunSpec (TCP) for smart home integration[2)]

[1)] Battery function enabled ex works (no activation code required).
[2)] KOSTAL Smart Energy Meter required.

PLENTICORE BI 25 G3: compact and rapidly deployable







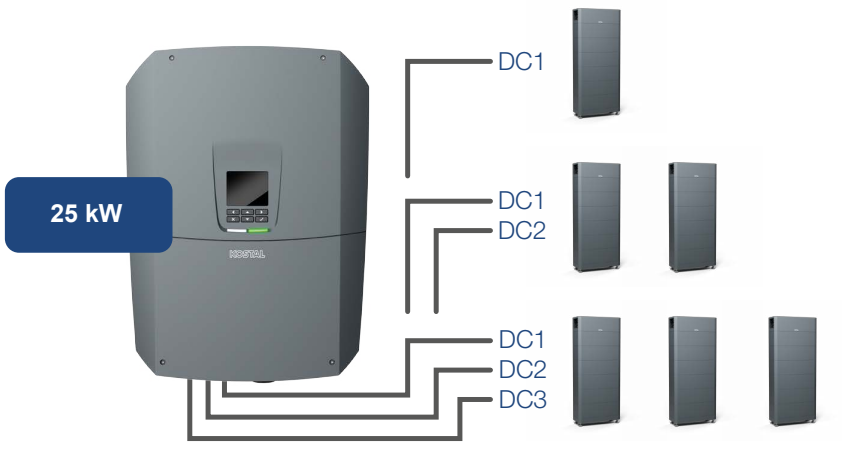
Services for our products

Activation of the KOSTAL Smart Warranty via shop.kostal-solar-electric.com
You can find all further information at www.kostal-solar-electric.com

PLENTICORE BI 25 G3: Technical data

	PLENTICORE BI 25 G3 G3		
	Basic power	kW	25
Input side (DC)	Max. charging/discharging current (I_{DCmax}) per DC input	A	68
	Max. harging/discharging current (I_{DCmax}) sum all DC inputs	A	68
	Number of DC inputs		3
	Min. working voltage for battery input ($U_{DCworkbatmin}$)	V	95
	Max. working voltage for battery input ($U_{DCworkbatmax}$)	V	880
Output side (AC)	Rated power, cos ϕ = 1 ($P_{AC,r}$)	kW	25
	Apparent output power ($S_{AC,Nom}$ / $S_{AC,max}$)	kVA	25/25
	Min. output voltage (U_{ACmin})	V	320
	Max. output voltage (U_{ACmax})	V	460
	Rated AC current ($I_{AC,r}$)	A	36,3
	Max. output current (I_{ACmax})	A	40
	Short-circuit current (peak/RMS)	A	56.8/40.4
	Grid connection		3N~, 230/400 V, 50 Hz
	Rated frequency (f_r)	Hz	50
	Grid frequency (f_{min}/f_{max})	Hz	47 / 52.5
	Setting range of the power factor (cos $\phi_{AC,r}$)		0.8 … 1 (ind./cap.)
	Power factor for rated power (cos $\phi_{AC,r}$)		1
	Max. THD	%	3
	Standby	W	3.5
Backup operation	Backup power operation		3N~, 230/400 V, 51 Hz
	Nominal apparent power in backup mode	kVA	25
	Nominal power per phase	kW	8.33
	Range cos ϕ		0...1
	Start-up apparent power for min. 5 sec at $U_{AC,r}$	kVA	27.6
	Max. output current per phase	A	40
	Start time with manual KOSTAL BackUp Switch	s	<5
	Start time with automatic backup box	s	<30
	Operating hours in backup mode	h	5000
η	Max. Wirkungsgrad Bat2AC	%	98.3
	Max. Wirkungsgrad AC2Bat	%	98.3

Flexible battery connection



Always connect battery storage from the same manufacturer, type, and capacity.

	PLENTICORE BI 25 G3		
System data	Topology: Without galvanic isolation – transformerless		yes
	Protection class according to IEC 60529		IP 65
	Protective class according to IEC 62103		I
	Overvoltage category according to IEC 60664-1, input side (PV generator)		II
	Overvoltage category according to IEC 60664-1, output side (grid connection)		III
	Degree of contamination		4
	Environmental category (outdoor installation)		yes
	Environmental category (indoor installation)		yes
	UV resistance		yes
	AC cable diameter (min-max)	mm	10...28
	AC cable cross-section (min-max)	mm^2	10...16
	DC cable cross-section (min-max)	mm^2	10...16
	Max. fuse protection on output side according to IEC 60898-1		B40/C40
	Internal operator protection according to EN 62109-2		yes
	Independent disconnection device according to VDE 0126-1-1		yes
	Mechanical DC disconnector according to IEC 60947-3	mm	561 / 409 / 237
	Height/width/depth	kg	22,3
	Weight		yes
	Cooling principle – regulated fans	m^3/h	184
	Max. air throughput	dB(A)	39,6
	Noise emission (typical)	°C	-20…60
	Ambient temperature	m	2000
	Max. installation altitude above sea level	%	4…100
	Relative humidity		SUNCLIX ES plug
	Connection technology, DC side		Spring-type terminal strip
	Connection technology, AC side		Push-In terminal
Interfaces	Connection technology, interfaces		2 / yes
	Connection of energy meter for collecting energy data (Modbus RTU)		yes
	Connection external switching device (backup)		yes
	Digital inputs		Ripple control receiver, FNN control box, external battery control, OVP monitoring
	Digital outputs (e.g. for self-consumption control)		4 (24 V, 100 mA)
	Clamping range, connection terminals, interfaces (min-max)	mm^2	0,2...1,5
	Webserver (user interface)		yes
	Warranty (Smart Warranty / Smart Warranty plus [1])	Jahre	10 (5 + 5)
	Directives/Certification [2]		CE, EN 62109-1, EN 62109-2

[1] Activate your free warranty (Smart Warranty) now in the KOSTAL Solar online shop (shop.kostal-solar-electric.com). For Smart Warranty Plus, you must also register your device in our KOSTAL Solar portal. This does not affect your statutory warranty. You will find more information about the service and warranty conditions in the download area for your product.

[2] Information on available Directive/parameter sets can be found in the product download area in the document 'Initial commissioning - Country setting'. Directive EN50438, EN50549-1: does not apply to all national annexes

06/2026 - EN - DOC03698951 - Subject to technical changes, errors excepted. You can find current information at www.kostal-solar-electric.com.