SOLAR ELECTRIC

KOSTAL

PLENTICORE BI

5.5/26 – 10/26 kW

Smart connections.

Data sheet

PLENTICORE BI: The efficient AC storage inverter

All-in-one

- Compatible with the high voltage battery Battery Box Premium HVM/HVS by BYD [1,2)]
- Application range for single-family homes to commercial
- Ideal for retrofitting existing PV systems

Smart connected

- Smart Communication Board – future proof, new functions can be added via the integrated Web Application
- Display, data logger, system monitoring, network and control interfaces integrated as standard
- Free Solar Portal for monitoring the PV system
- Modbus/Sunspec (TCP) for Smart Home integration

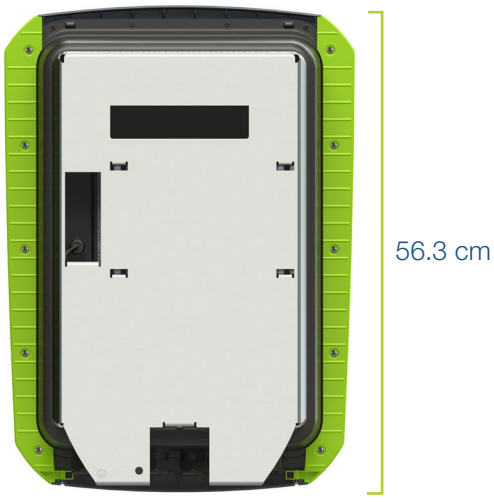
Smart performance

- Low conversion losses due to high-voltage battery
- Battery charging from various AC energy sources [2)]
- Flexible Scalable by connecting battery storages in the size 5.1 – 66.3 kWh
- Peak shaving (short-term and rapid reduction of peak loads) [2)]
- Timed Battery Control – Charging/Discharging when power consumption is low / high [2)]

Easy to install

- Simple device configuration using commissioning wizard
- Safe installation due to clearly arranged, separate terminal compartment and protected power electronics
- Compatible with RCD type A
- Auto Update: Always at the cutting edge of technology

PLENTICORE BI: compact and rapidly deployable



[1)] Battery function enabled at the factory (no battery activation code required).
[2)] KOSTAL Smart Energy Meter necessary

Technical data PLENTICORE BI

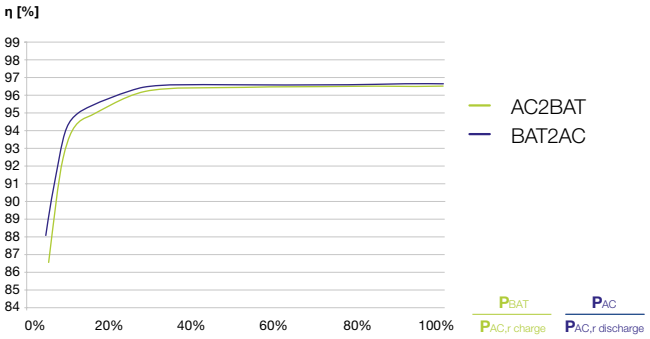
	Power class PLENTICORE BI		5.5/26	10/26
Input (DC)	Working voltage for battery input ($U_{DCworkbatmin}$ - $U_{DCworkbatmax}$)	V	120...650	
	Max. charging/discharging current at battery input	A	26/26	26/26
	Number of DC inputs		1	
Output (AC)	Rated power, cos φ = 1 ($P_{AC,r}$)	kW	5.5	10
	Apparent output power ($S_{AC,Nom}$, $S_{AC,max}$)	kVA	5.5	10
	Min. output voltage (U_{ACmin})	V	320	
	Max. output voltage (U_{ACmax})	V	500	
	Rated output current ($I_{AC,r}$)	A	7.94	14.43
	Max. output current (I_{ACmax})	A	8.82	16.04
	Short-circuit current (peak/RMS)	A	12.5/8.8	22.8/16.1
	Grid connection		3N~, 400 V, 50 Hz	
	Rated frequency (f_r)	Hz	50	
	Min/max grid frequency (f_{min}/f_{max})	Hz	47/53	
	Setting range of the power factor (cos $\varphi_{AC,r}$)		0.8 ...1... 0.8	
	Power factor for rated power (cos $\varphi_{AC,r}$)		1	
	Max. THD	%	3	
	Standby	W	7.9	
η	Max. efficiency Bat2AC	%	96.6	96.7
	Max. efficiency AC2Bat	%	96.8	96.8

	Power class PLENTICORE BI		5.5/26	10/26
System data	Topology: Without galvanic isolation – transformerless		✓	
	Protection class according to IEC 60529		IP 65	
	Protective class according to IEC 62103		I	
	Overvoltage category according to IEC 60664-1, output side (grid connection)		III	
	Degree of contamination		4	
	Environmental category (indoor installation)		✓	
	UV resistance		✓	
	AC cable diameter (min-max)	mm	8...17	
	AC cable cross-section (min-max)	mm^2	1.5...6	4...6
	BAT cable cross-section	mm^2	6	6
	Max. fuse protection on output side		B16/C16	B25/C25
	Internal operator protection according to EN 62109-2 (compatible with RCD type A)		✓	
	Independent disconnection device according to VDE 0126-1-1		✓	
	Height/width/depth	mm	563/405/233	
	Weight	kg	17.9	19.9
	Cooling principle – regulated fans		✓	
	Max. air throughput	m^3/h	184	
	Noise emission (typical)	dB(A)	39	
	Ambient temperature	°C	-20…60	
	Max. installation altitude above sea level	m (ft)	2000	
	Relative humidity	%	4…100	
	Connection technology, DC side		SUNCLIX plug	
	Connection technology, AC side		Spring-type terminal strip	
Interfaces	Ethernet LAN (RJ45)		1	
	Connection of energy meter for collecting energy data (Modbus RTU)		1	
	Digital inputs (e.g. for digital ripple control receiver)		4	
	USB 2.0		1	
	Webserver (user interface)		✓	
	Warranty (Smart Warranty / Smart Warranty plus [1])	Years	10 (5 + 5)	
	Directives/Certification		CE, GS, IEC62109-1, IEC62109-2, EN60529, DIN VDE 0126-1-1:2013-08, VDE AR-N4105:2018, VDE AR-N4100:2018, TOR Erzeuger, ÖNORM E8001-4-712/A2:2016, NA/EEA:2014, IEC62116:2014	

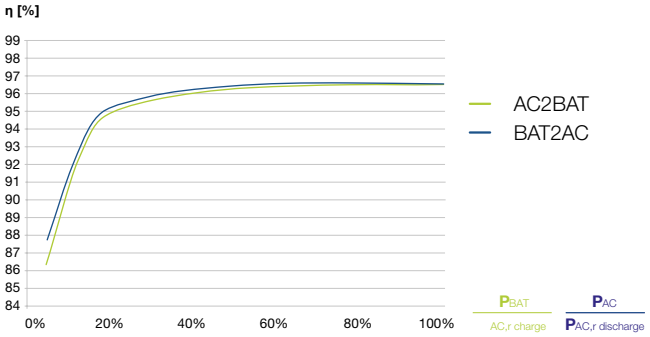
Subject to technical changes. Errors excepted. You can find current information at www.kostal-solar-electric.com. Manufacturer: KOSTAL Industrie Elektrik GmbH, Hagen, Germany

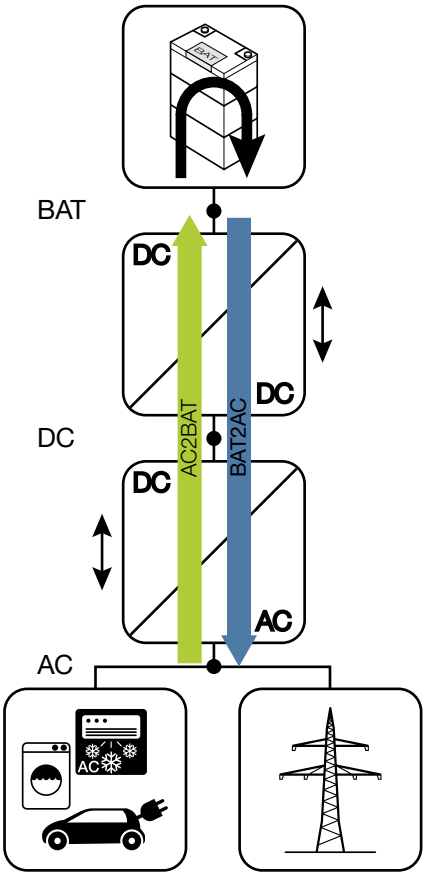
[1] Activate your free warranty (Smart Warranty) now in the KOSTAL Solar online shop (shop.kostal-solar-electric.com). This does not affect your statutory warranty. You will find more information about the service and warranty conditions in the download area for your product.

PLENTICORE BI 5.5/26



PLENTICORE BI 10/26





Services for our products

FAQs:
kostal-solar-electric.com/Service_Support

Product registration, KOSTAL Smart Warranty, warranty extension or purchase of accessories:
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Smart
connections.