

PLENTICORE G3

with battery



Technical Specification

PLENTICORE G3



PLENTICORE G3		S			M			L			
Basic power	kW	4.0			8.5			15			
Optional power upgrade level 1 ¹⁾	kW	5.5			10			17.5			
Optional power upgrade level 2 ¹⁾	kW	7.0			12.5			20			
Input side (DC)	Max. PV power (cos φ = 1)	kWp	6	8.25	10.25	12.75	15	18.75	22.5	26.5	30
	Max. PV power per DC input	kW	8.25	8.25	8.25	10.5	10.5	10.5	18	18	18
	Nominal DC power	kW	4.08	5.61	7.14	8.67	10.2	12.75	15.3	17.85	20.4
	Start-up input voltage (U _{DCstart})	V	95								
	Max. system voltage (U _{DCmax})	V	1000								
	MPP range at rated output (U _{MPPmin}) ³⁾	V	80	110	140	170	200	250	170	198	227
	MPP range at rated output (U _{MPPmax}) ³⁾	V	800	800	800	800	800	800	800	800	800
	Working voltage range (U _{DCworkmin} - U _{DCworkmax}) ⁴⁾	V	75...900								
	Max. input current (I _{DCmax}) DC1/DC2 input	A	17			17			30		
	Max. input current (I _{DCmax}) DC3 input	A	17			30			30		
	Number of DC inputs		3								
	Number of combined DC inputs (PV or battery)		1								
	Number of independent MPP trackers		3								
	DC 3 - Batterieingang optional										
	Min. Working voltage for battery input (U _{DCworkbatmin})	V	95								
	Max. Working voltage for battery input (U _{DCworkbatmax})	V	650								
Max. charging/discharging current at battery input	A	17/17			30/30			30/30			
Output side (AC)	Rated power, cos φ = 1 (P _{AC,r})	kW	4.0	5.5	7.0	8.5	10	12.5	15	17.5	20
	Apparent output power (S _{AC,Nom} , S _{AC,max})	kVA	4.0/ 4.0	5.5/ 5.5	7.0/ 7.0	8.5/ 8.5	10/ 10	12.5/ 12.5	15/ 15	17.5/ 17.5	20/ 20
	Min. Output voltage (U _{ACmin})	V	320								
	Max. Output voltage (U _{ACmax})	V	460								
	Max. output current (I _{ACmax})	A	11.20			20			32		
	Grid connection		3N~, 230/400V, 50 Hz								
	Standby	W	5								
Backupoperation	Backup power operation		3N~, 230/400V, 50 Hz								
	Nominal output power ²⁾	kW	7.0			12.5			20		
	Nominal power per phase	kW	2.33			4.16			6.66		
	Unbalanced load	kW	tbd.								
Switching time	s	<60									
η	Max. efficiency	%	> 98	> 98	> 98	> 98	> 98	> 98	> 98	> 98	> 98
	European efficiency	%	> 97	> 97	> 97	> 97	> 97	> 97	> 97	> 97	> 97
System data	Protection class according to IEC 60529		IP 65								
	Height/width/depth	mm	561 / 409 / 237								
	Weight	kg	19.6			21.6			24.1		
	Ambient temperature	°C	-20...60								
Connection technology, DC side		SUNCLIX plug									
Directives/Certification ²⁾		CE, GS, CEI 0-21, C10/11, EN 62109-1, EN 62109-2, EN 60529, EN 50438, EN 50549-1, NA/EEA, G98, G99, EIFS2018, IEC 61727, IEC 62116, RD 1699, RD 647, RFG, TOR Erzeuger, UNE 206006, UNE 206007-1, VDE 0126-1-1, VDE-AR-N 4105, VDE-AR-N 4110, VJV2018									

¹⁾ Optional battery and power extension available for a fee from your wholesaler.

²⁾ Nominal output power: The actual output power depends on the system and storage size.

³⁾ MPP range at nominal power: Outside the MPP range, MPP control takes place below the nominal power. Based on full occupancy of all MPP trackers.

⁴⁾ Working voltage range: No feed-in takes place outside the working voltage range.

PLENTICORE G3 with AXITEC AXIstorage Li SV1/SV2



AXITEC AXIstorage Li SVx		SV1 10.1 ²⁾	SV1 13.5 ²⁾	SV1 16.9 ²⁾	SV1 20.2 ²⁾	SV1 23.6 ²⁾	SV2 6.7 ³⁾	SV2 10.1 ³⁾	SV2 13.5 ³⁾	
Modul type		Li-Ion LFP 3.552 kWh, 48 V, 74 Ah, 36 kg					Li-Ion LFP 3.552kWh, 96V, 37Ah, 35kg			
Max. Power consumption in connection with PLENTICORE S G3	kW	2.4	3.3	4.1	4.9	5.7	3.3	4.9	6.5	
Max. Power consumption in connection with PLENTICORE M/L G3	kW	4.3/4.3	5.8/5.8	7.2/7.2	8.6/8.6	10.1/10.1	5.8/5.8	8.6/8.6	10.5/11.5	
Usable capacity 95%/100% DoD ¹⁾	kWh	10.1/10.65	13.5/14.20	16.9/17.76	20.2/21.31	23.6/24.86	6.7/7.10	10.1/10.65	13.5/14.20	
Number of battery modules		3	4	5	6	7	2	3	4	
Nominal voltage	V	144	192	240	288	336	192	288	384	
Voltage range	V	130.5-162	174-216	217.5-270	261-324	304.5-378	174-216	261-324	348-432	
Interface to inverter		RS485								
Height	mm	700	870	1040	1210	1380	822	1118	1414	
Width/depth	mm	600/380					450/296			
Weight	kg	122	158	194	230	266	82	117	152	
Ambient temperature	°C	-0...50								
IP protection class		IP 55								
Certification / Safety Standard		VDE2510-50, IEC62619, IEC62477-1, IEC62040-1, CEC, CE, UN38.3								
EMV		EN 61000-6-2, EN 61000-6-3								

¹⁾ According to the battery manufacturer, ²⁾ Axitec AXIstorage Li SV1 battery compatible with BMS module: Li SV1 BMS with article number: AY10785, ³⁾ Axitec AXIstorage Li SV2 battery compatible with BMS module: Li SV2 BMS with article number: AY10786

PLENTICORE G3 with BYD Battery-Box HV



BYD Battery-Box HV		H 6.4	H 7.7	H 9.0	H 10.2	H 11.5
Module type		HVS (High Voltage Small) 102.4 V, 25 Ah, 1.28 kWh, 26 kg, LiFePO ₄				
Max. Power consumption in connection with PLENTICORE S G3	kW	4.4	5.2	6.1	7.0	7.0
Max. Power consumption in connection with PLENTICORE M/L G3	kW	6.4/6.4	7.7/7.7	9.0/9.0	10.2/10.2	10.5/11.5
Usable capacity 95%/100% DoD ¹⁾	kWh	6.1/6.4	7.3/7.7	8.6/9.0	9.7/10.2	10.9/11.5
Number of battery modules		5	6	7	8	9
Nominal voltage	V	256	307	358	409	512
Voltage range	V	160-240	240-360	240-360	320-480	400-600
Interface to inverter		RS485				
Height	mm	894	1014	1134	1254	1374
Width/depth	mm	580/380				
Weight	kg	148	174	200	226	252
Ambient temperature	°C	-10...50				
IP protection class		IP 55				
Certification / Safety Standard		CE, UL1642, TÜV (IEC62619), RCM, UN38.3				

¹⁾ Test Conditions: 0,2 C charge and discharge at + 25 °C, real usable capacity with PLENTICORE plus system / theoretically usable capacity acc. BYD battery data sheet at 100% DoD

PLENTICORE G3 with BYD Battery-Box Premium HVS/HVM



BYD Battery-Box Premium		HVS 5.1	HVS 7.7	HVS 10.2	HVS 12.8	HVM 8.3	HVM 11.0	HVM 13.8	HVM 16.6	HVM 19.3	HVM 22.1	
System data	Module type	HVS (High Voltage Small) 2.56kWh, 102.4V, 25Ah, 38kg, LiFePO ₄				HVM (High Voltage Medium) 2.76 kWh, 51.2 V, 53 Ah, 38 kg, LiFePO ₄						
	Max. Power consumption in connection with PLENTICORE S G3	kW	3.5	5.2	7.0	7.0	2.6	3.5	4.4	5.2	6.1	7.0
	Max. Power consumption in connection with PLENTICORE M/L G3	kW	5.1/ 5.1	7.7/ 7.7	10.2/ 10.2	10.5/ 12.8	4.6/ 4.6	6.1/ 6.1	7.7/ 7.7	9.2/ 9.2	10.5/ 10.7	10.5/ 12.2
	Usable capacity 95%/100% DoD ¹⁾	kWh	4.86/ 5.12	7.30/ 7.68	9.73/ 10.24	12.16/ 12.8	7.87/ 8.28	10.49/ 11.04	13.11/ 13.8	15.73/ 16.56	18.35/ 19.32	20.98/ 22.08
	Number of battery modules		2	3	4	5	2	4	5	6	7	8
	Nominal voltage	V	204	307	409	512	153	204	256	307	358	409
	Voltage range	V	160- 240	240- 360	320- 480	400- 600	120- 180	160- 240	200- 300	240- 360	280- 420	320- 480
	Interface to inverter		RS485									
	Height	mm	712	945	1178	1411	945	1178	1411	1644	1877	2110
	Width/depth	mm	585/298									
	Weight	kg	91	129	167	205	129	167	205	243	281	319
	Ambient temperature	°C	-10...50									
	IP protection class		IP 55									
	Certification / Safety Standard		VDE2510-50 / IEC62619 / CEC / CE / UN38.3									

¹⁾ Test Conditions: 0,2 C charge and discharge at +25 °C, real usable capacity with PLENTICORE plus system / theoretically usable capacity acc. BYD battery data sheet at 100% DoD

PLENTICORE G3 with Dyness Tower



Dyness Tower		T7	T10	T14	T17	
System data	Modul type	Li-Ion LFP 3.552 kWh, 96 V, 37 Ah, 41 kg				
	Max. Power consumption in connection with PLENTICORE S G3	kW	3.3	4.9	6.5	7.0
	Max. Power consumption in connection with PLENTICORE M/L G3	kW	4.8/4.8	7.2/7.2	9.6/9.6	10.5/10.5
	Usable capacity 95%/100% DoD ¹⁾	kWh	6.7/7.1	10.2/10.7	13.5/14.2	16.9/17.8
	Number of battery modules		2	3	4	5
	Nominal voltage	V	192	288	384	480
	Voltage range	V	168-219	252-328	336-438	420-547
	Interface to inverter		RS485			
	Height	mm	700	900	1100	1300
	Width/depth	mm	504/380			
	Weight	kg	105	146	187	228
	Ambient temperature	°C	-0...50			
	IP protection class		IP54			
	Certification / Safety Standard		IEC 62040-1, IEC 62619, IEC 63056, UL1973. CE			
EMV		EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4				

¹⁾ According to the battery manufacturer

PLENTICORE G3 with LG RESU FLEX



LG Energy Solution		RESU FLEX 8.6	RESU FLEX 12.9	RESU FLEX 17.2	
System data	Modul type	Li-Ion NMC, BMA 48.9 kg ²⁾ , BPU 16.5 kg ²⁾			
	Max. Power consumption in connection with PLENTICORE S G3	kW	3.3	4.9	6.5
	Max. Power consumption in connection with PLENTICORE M/L G3	kW	4.2/4.2	6.3/6.3	8.4/8.4
	Usable capacity 95%/100% DoD ¹⁾	kWh	8.17/8.60	12.26/12.90	16.34/17.20
	Number of battery modules		2	3	4
	Nominal voltage	V	192-265.6	288-398.4	384-531.2
	Interface to inverter		RS485		
	Height	mm	665.2		
	Width		665.2		
	Depth	mm	445.2	593.6	742
	Weight	kg	114.3	163.2	212.1
	Ambient temperature	°C	-10...50		
	IP protection class		IP 55		
	Certification / Safety Standard		CE, RCM, UL1973, IEC62619, IEC62477-1		
EMV		FCC, IEC61000-6-1, IEC61000-6-2, IEC61000-6-3			

¹⁾ According to the battery manufacturer, ²⁾ The weight of the bracket and design cover is not included.

PLENTICORE G3 with PYLONTECH Force-H1/H2



PYLONTECH Force		H1-V2 10.65 ²⁾	H1-V2 14.20 ²⁾	H1-V2 17.76 ²⁾	H1-V2 21.31 ²⁾	H1-V2 24.86 ²⁾	H2-V2 7.10 ³⁾	H2-V2 10.65 ³⁾	H2-V2 14.21 ³⁾		
System data	Modul type	Li-Ion LFP 3.552 kWh, 48 V, 74 Ah, 36 kg					Li-Ion LFP 3.552kWh, 96V, 37Ah, 35kg				
	Max. Power consumption in connection with PLENTICORE S G3	kW	2.4	3.3	4.1	4.9	5.7	1.3	2.0	2.7	
	Max. Power consumption in connection with PLENTICORE M/L G3	kW	4.3/ 4.3	5.8/ 5.8	7.2/ 7.2	8.6/ 8.6	10.1/ 10.1	5.8/ 5.8	8.6/ 8.6	10.5/ 11.5	
	Usable capacity 95%/100% DoD ¹⁾	kWh	10.1/ 10.65	13.5/ 14.20	16.9/ 17.76	20.2/ 21.31	23.6/ 24.86	6.7/ 7.10	10.1/ 10.65	13.5/ 14.20	
	Number of battery modules		3	4	5	6	7	2	3	4	
	Nominal voltage	V	144	192	240	288	336	192	288	384	
	Voltage range	V	130.5- 162	174- 216	217.5- 270	261- 324	304.5- 378	174- 216	261- 324	348- 432	
	Interface to inverter		RS485								
	Height	mm	700	870	1040	1210	1380	822	1118	1414	
	Width/depth	mm	600/380					450/296			
	Weight	kg	122	158	194	230	266	82	117	152	
	Ambient temperature	°C	-0...50								
	IP protection class		IP 55								
	Certification / Safety Standard		VDE2510-50, IEC62619, IEC62477, IEC62040, UN38.3, CE								
EMV		EN 61000-6-2, EN 61000-6-3									

¹⁾ According to the battery manufacturer, ²⁾ Pylontech Force-H1-V2 battery compatible with BMS modul: FC0500-40S-V2 mit article number 11FC0500ZZA-00013, ³⁾ Pylontech Force-H2-V2 battery compatible with BMS modul: FC0500M-40S-V2 mit article number 11FC0500MZA-00013

