



# 525W - 550W BF 182 Mono PERC 10BB Half Cut 72x2

Design Parameters		Related Standards	Drawing		
Product Model	PS-MO-BFHC-GG-XXX	TS EN 61215-1 / 20.03.2017			
Cell Type	BF 182 Mono PERC 10BB	TS EN 61730-2 / 19.11.2018			
Number of Cells	Half Cut 72x2	TS EN 61215-2 / 18.12.2017			
Glass	2 mm + 2 mm	TS EN IEC 61730-1 / 19.11.2018			
Back Cover	Glass	TS EN 61730-1 / 31.01.2008			
Frame	Anodized Aluminium Alloy	TS EN 61215-1-1 / 09.12.2016			
Output Cables	1200-1100-300 mm 1x4,0 mm2				
Junction Box	IP68 Rated				
<b>Packing</b>					
Weight	33 kg				
Dimension	2285mm-1134mm / 30x30 Gray				
Pieces	37 pcs/pallet				
Truck	592 pcs / Truck				

Power Class	Electrical Characteristics											
	550		545		540		535		530		525	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Module Efficiency	21,49%		21,20%		21,02%		20,81%		20,66%		20,46%	
Maximum Power (Pmax)	550	408,32	545	404,61	540	400,90	535	397,18	530	393,47	525	389,76
Maximum Power Voltage (Vmp)	41,50	35,76	41,30	35,59	41,10	35,41	40,90	35,24	40,85	35,20	40,82	35,17
Maximum Power Current (Imp)	13,25	11,42	13,20	11,37	13,14	11,32	13,08	11,27	12,97	11,18	12,86	11,08
Open Circuit Voltage (Voc)	50,10	43,17	49,90	43,00	49,70	42,82	49,50	42,65	49,45	42,61	49,40	42,56
Short Circuit Current (Isc)	13,99	12,05	13,96	12,03	13,90	11,98	13,84	11,92	13,74	11,84	13,64	11,75

\*Standart Test Conditions (STC): irradiance 1000W/ m2 ,A.M 1.5, cell temperature 25 °C\* - \*Nominal Operating Cell Temperature (NOCT): irradiance 800W/ m2 , A.M 1.5, Ambient temperature 20 °C, Wind 1 m/s.Diagrams for STC.\*

Temperature Ratings		Diagrams	
Temperature Coefficient of Pmax	-0,36% (°C)	-0,36% (°C)	
Temperature Coefficient of Voc	-0,30% (°C)	-0,30% (°C)	
Temperature Coefficient of Isc	0,05% (°C)	0,05% (°C)	
Operating Temperature (°C)	-40(°C) ~+85 (°C)	-40(°C) ~+85 (°C)	
<b>Electrical Limits</b>		<b>IV Diagram under different Irradiance</b>	
Maximum System Voltage	1500VDC (IEC & UL)	1500VDC (IEC & UL)	
Maximum Series Fuse Rating	25 A	25 A	
Power Tolerance	0 ~ +3%	0 ~ +3%	
<b>Mechanical Limits</b>		<b>Power/Voltage Diagram under different Irradiance</b>	
Front Side Static Design Loading	3600 Pa	3600 Pa	
Back Side Static Design Loading	1600 Pa	1600 Pa	
Hailstone	d: 25 mm, 23 m/s	d: 25 mm, 23 m/s	



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## Half Cut 72x2

	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
<b>Calculated Rear Side Gain Values based on 5%</b>												
<b>Module Efficiency</b>	22,56%		22,26%		22,07%		21,85%		21,70%		21,48%	
Maximum Power (Pmax)	577,50	427,81	572,25	423,92	567,00	420,03	561,75	416,14	556,50	412,26	551,25	408,37
Maximum Power Voltage (Vmp)	41,50	35,72	41,30	35,55	41,10	35,37	40,90	35,20	40,85	35,16	40,82	35,13
Maximum Power Current (Imp)	13,92	11,98	13,86	11,93	13,80	11,87	13,73	11,82	13,62	11,73	13,50	11,62
Open Circuit Voltage (Voc)	50,10	43,12	49,90	42,95	49,70	42,78	49,50	42,60	49,45	42,56	49,40	42,52
Short Circuit Current (Isc)	14,69	12,64	14,66	12,62	14,60	12,56	14,53	12,51	14,43	12,42	14,32	12,33
<b>Calculated Rear Side Gain Values based on 10%</b>												
<b>Module Efficiency</b>	23,32%		23,32%		23,12%		22,89%		22,73%		22,50%	
Maximum Power (Pmax)	605,00	448,18	599,50	444,11	594,00	440,04	588,50	435,96	583,00	431,89	577,50	427,81
Maximum Power Voltage (Vmp)	41,50	35,72	41,30	35,55	41,10	35,37	40,90	35,20	40,85	35,16	40,82	35,13
Maximum Power Current (Imp)	14,58	12,55	14,52	12,49	14,45	12,44	14,39	12,38	14,27	12,28	14,15	12,18
Open Circuit Voltage (Voc)	50,10	43,12	49,90	42,95	49,70	42,78	49,50	42,60	49,45	42,56	49,40	42,52
Short Circuit Current (Isc)	15,39	13,25	15,36	13,22	15,29	13,16	15,22	13,10	15,11	13,01	15,00	12,91
<b>Calculated Rear Side Gain Values based on 15%</b>												
<b>Module Efficiency</b>	24,71%		24,38%		24,17%		23,94%		23,76%		23,53%	
Maximum Power (Pmax)	632,50	468,56	626,75	464,30	621,00	460,04	615,25	455,78	609,50	451,52	603,75	447,26
Maximum Power Voltage (Vmp)	41,50	35,72	41,30	35,55	41,10	35,37	40,90	35,20	40,85	35,16	40,82	35,13
Maximum Power Current (Imp)	15,24	13,12	15,18	13,06	15,11	13,00	15,04	12,95	14,92	12,84	14,79	12,73
Open Circuit Voltage (Voc)	50,10	43,12	49,90	42,95	49,70	42,78	49,50	42,60	49,45	42,56	49,40	42,52
Short Circuit Current (Isc)	16,09	13,85	16,05	13,82	15,99	13,76	15,92	13,70	15,80	13,60	15,69	13,50
<b>Calculated Rear Side Gain Values based on 20%</b>												
<b>Module Efficiency</b>	25,78%		25,44%		25,22%		24,98%		24,80%		24,55%	
Maximum Power (Pmax)	660,00	488,93	654,00	484,48	648,00	480,04	642,00	475,59	636,00	471,15	630,00	466,70
Maximum Power Voltage (Vmp)	41,50	35,72	41,30	35,55	41,10	35,37	40,90	35,20	40,85	35,16	40,82	35,13
Maximum Power Current (Imp)	15,90	13,69	15,84	13,63	15,77	13,57	15,70	13,51	15,57	13,40	15,43	13,28
Open Circuit Voltage (Voc)	50,10	43,12	49,90	42,95	49,70	42,78	49,50	42,60	49,45	42,56	49,40	42,52
Short Circuit Current (Isc)	16,79	14,45	16,75	14,42	16,68	14,36	16,61	14,29	16,49	14,19	16,37	14,09
<b>Calculated Rear Side Gain Values based on 25%</b>												
<b>Module Efficiency</b>	26,86%		26,50%		26,27%		26,02%		25,83%		25,57%	
Maximum Power (Pmax)	687,50	509,30	681,25	504,67	675,00	500,04	668,75	495,41	662,50	490,78	656,25	486,15
Maximum Power Voltage (Vmp)	41,50	35,72	41,30	35,55	41,10	35,37	40,90	35,20	40,85	35,16	40,82	35,13
Maximum Power Current (Imp)	16,57	14,26	16,50	14,20	16,42	14,14	16,35	14,07	16,22	13,96	16,08	13,84
Open Circuit Voltage (Voc)	50,10	43,12	49,90	42,95	49,70	42,78	49,50	42,60	49,45	42,56	49,40	42,52
Short Circuit Current (Isc)	17,49	15,05	17,45	15,02	17,38	14,95	17,30	14,89	17,18	14,78	17,05	14,67