HELIOS VOLT®

PURE Bifacial PV Parking Canopies Technical Data Sheet

PURE BIFACIAL PV

The most powerful and progressive Solar PV parking canopy

MSR – MULTI STOREY ROOF

Structurally engineered solution specially designed to be integrated into the existing MSCP structure. Our engineers, will assess existing structure and perform load calculations to provide a bespoke fixing design.

LOW PASS HEIGHT 2.2m – MINIMUM WIDTH 4 PARKING BAYS – ANGLE OF TILT 7° TO 10°

MSR – MULTI STOREY ROOF

FS – FREE STANDING SELF-BALLASTED

Precast Kentledge reinforced concrete base, with cast in anchors to secure canopy structure, a perfect solution for dynamic estates. It can be demounted and moved to another zone onsite or to a new location altogether.

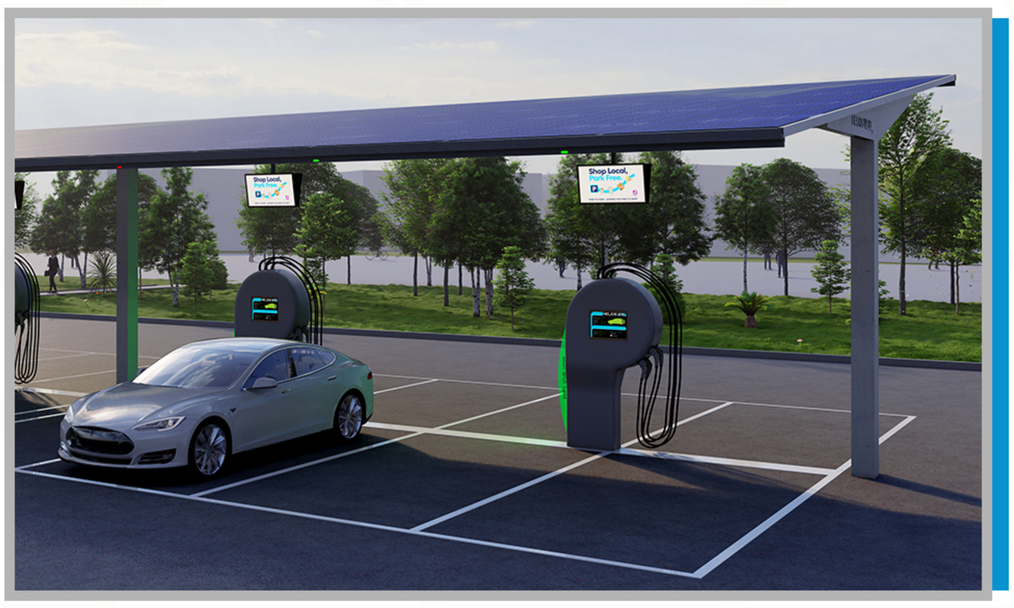
LOW PASS HEIGHT 2.4m – MINIMUM 8 PARKING BAY WIDTH – ANGLE OF TILT 7° TO 10°

FS – FREE STANDING SELF-BALLASTED

PF – PERMANENT FOUNDATION

Structurally engineered to suit existing ground and weather conditions, each galvanised steel column requires below ground reinforced concrete foundation.

LOW PASS HEIGHT 2.4m - MINIMUM 4 PARKING BAY WIDTH – ANGLE OF TILT 7° TO 10°



PF – PERMENANT FOUNDATION

CREATING POWERFUL SPACES™

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Technical Data

Helios Volt® PURE Bifacial Canopies Azimuth 180° - Mono Tilt 10°

Parking Bays	PV Canopy Area m²	BSTC - kW Power	kWh-AC Output
16	211.2	52.03	52,863
20	264.0	65.04	66,079
24	316.8	78.05	79,295
28	369.6	91.06	92,511
32	422.4	104.06	105,726
36	475.2	117.07	118,942
40	528.0	130.08	132,158
44	580.8	143.09	145,374
48	633.6	156.10	158,590
52	686.4	169.10	171,805
56	739.2	182.11	185,021
60	792.0	195.12	198,237
64	844.8	208.13	211,453
68	897.6	221.14	224,669
72	950.4	234.14	237,884
76	1003.2	247.15	251,100
80	1056.0	260.16	264,316
84	1108.8	273.17	277,532
88	1161.6	286.18	290,748
92	1214.4	299.18	303,963
96	1267.2	312.19	317,179
100	1320.0	325.20	330,395
116	1531.2	377.23	383,258
132	1742.4	429.26	436,121
148	1953.6	481.30	488,985
164	2164.8	533.33	541,848
180	2376.0	585.36	594,711
196	2587.2	637.39	647,574
212	2798.4	689.42	700,437
228	3009.6	741.46	753,301
244	3220.8	793.49	806,164
260	3432.0	845.52	859,027
276	3643.2	897.55	911,890
292	3854.4	949.58	964,753
308	4065.6	1001.62	1,017,617

Data set Meteonorm V8.1 10Y TMY Location: London Gatwick Airport
Lat.51°9' 8" North -Long 0°10' 57" W (Based on P90 kWh/kWp 1017.7)

The specification and key features described in this data sheet may deviate slightly and are not guanranteed. CrowdHouse Energy reserves the right to make any adjustment to the information described herein at any time without notice. Please always obtain the latest version of the data sheet which shall be duly incorporated into the binding contract made by the parties governing all transactions related to the purchase and sale of the products described herein.

Huasun recognised as global leaders in Heterojunction Technology (HJT) and Bloomberg Tier 1 manufacturer.

Advantages of Heterojunction Technology (HJT)

Higher Conversion Efficiency

HJT solar cell uses a-Si thin-film as passivation materials to reduce the loss caused by migration, which could increase the open-circuit voltage to 750mV and guarantee an initial efficiency of up to 24%.

More Energy Yield

Due to the natural bifacial symmetrical structure, bifaciality of HJT solar module could be up to 95%. And the energy yield gains can reach more than 30% benefiting from the power generation on the back side.

Better Weak Light Performance

The minority carrier lifetime of n-type solar cell is longer, leading a better power generation under weak-light, which is about 0.5%~1% higher than that of bifacial PERC solar cell per watt.

Thinner Wafer Adapted

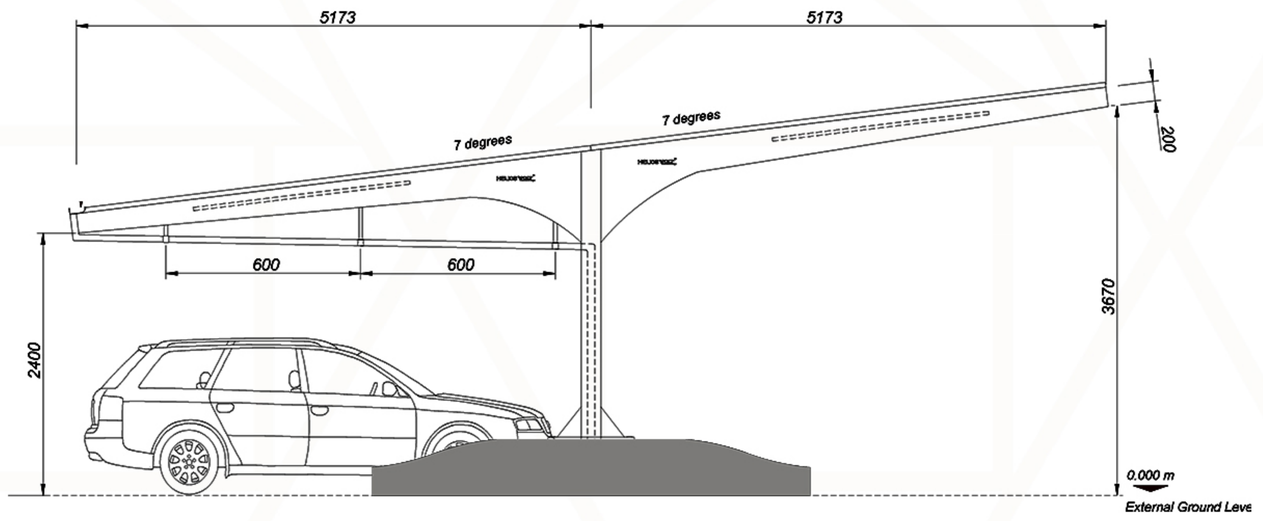
HJT solar cell can realise 90pm wafer application while ensuring the quality, and can be superimposed with OBB and shingle technology to improve he efficiency and save the cost.

Lower Degradation Rate

HJT solar cells are made of n-type wafer which does not have B-O bond, resulting in no LID. TCO film on HJT solar cell is conductive, so the charge won't polarise on the surface, which can avoid PID from the structure.

Ultra-Low Carbon Footprint

In 2023, Huasun HJT solar module achieve carbon footprint as low as 366g CO2 eq/W. Through ongoing technological research and industrialisation, it will be under 300g CO2 eq/W in future.



CrowdHouse Energy have partnered with Anhui Huasun Energy Co., Ltd (hereinafter referred to as "Huasun")

At present, the highest efficiency of Huasun HJT solar cells in mass production has reached 26.5%, holding a leading position in the PV industry.

CrowdHouse Energy lead the way in PURE Bifacial Technology; our Hypernova™ module not only gathers over 30% more energy, than our competitors solutions but, our Factory Assembled Modular Construction is Quality Assured and tested before leaving our factory in Newcastle.

Hypernova™ Modules are a perfect match for Huasun G12-B132-725 Bifacial double glass panels.

PURE Bifacial design ensures our HJT cells are harvesting every W/m² of solar irridiance surrounding our canopy. Our innovation was to design a frame to hold all 8 panels securely without obstruction from the steel structure or cabling.

Structurally bonding Huasun G12 panels to the Hypernova frame not only provides frame-to-frame rigidity, it also makes the Hypernova™ completely watertight, it is delivered to site plug and play ready.

30 YEARS LINEAR POWER WARRANTY

30 YEARS PRODUCT WARRANTY

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