Oakridge POWER

CORE Series Bifacial Modules

Power Range | 580-600W
Maximum Efficiency | 23.23%

Power Output Tolerance | 0W ~ +5W

FEATURES

Outstanding Performance

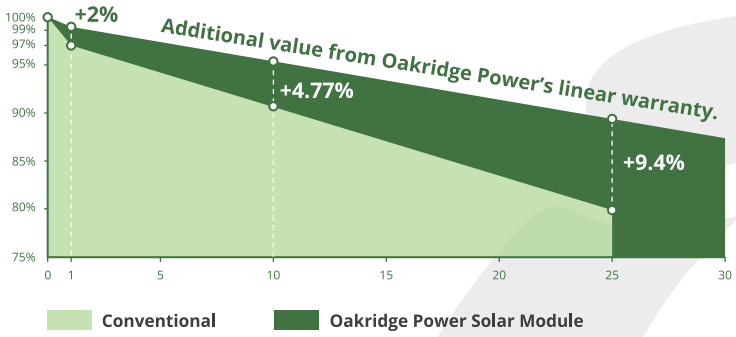
- More than 23% industry leading efficiency
- More power per square foot for tight roofs
- Excellent temperature coefficient for hot climates
- Bifacial design captures reflected light with no extra cost

Long-Term Reliability

- Advanced dual-glass structure resists moisture and PID
- First year degradation under 1% from day one
- 30 year power warranty plus 12 year product warranty

Lifetime Investment Return

- Higher energy harvest reduces balance-of-system costs
- More power and lower degradation shorten your payback period
- Lower Levelized Cost of Energy over 30 years



30 years — *Linear power output warranty*

12 years — *Guarantee on product material and workmanship*

1st-year ≤ **1%**

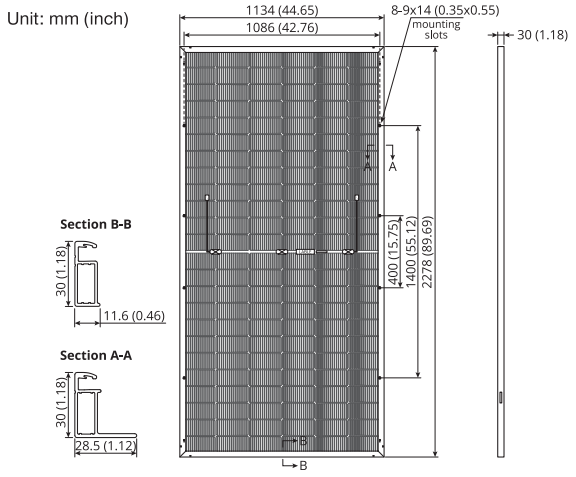
2nd~30th year ≤ **0.40%** */year*

OAKRIDGE POWER LLC | www.oakridge-power.com | info@oakridge-power.com

C SA® US

CORE Series Bifacial Modules OPA-HBDW580~600-182(72)

Physical Characteristics



Mechanical Description

No. of Half cells	144pcs(6×24)
Dimension	2278×1134×30mm (89.69 × 44.65 × 1.18in)
Weight	31.2kg (68.78lbs)
Front Glass	2.0mm, highly transparent tempered glass with anti-reflective coating
Rear Glass	2.0mm, tempered glass
Frame	Anodized aluminum alloy
Junction Box	IP68 rated
Cable	4mm², portrait: 400mm(+) / 200mm (-), landscape: 1400mm (+) / 1400mm (-), can be customized
Diode Quantity	3 pcs
Connector	MC4 Compatible

Temperature Characteristics

Nominal Module Operating Temperature	44±2°C	**Temperature Coefficient (V_{OC})**	-0.25%
Temperature Coefficient (I_{SC})	+0.043%	**Temperature Coefficient (P_{MAX})**	-0.30%

Maximum Parameters

Load Rating	Front Side 5400pa Rear Side 2400pa	**Maximum System Voltage**	1500V DC
Operating Temperature	-40~+85°C	**Maximum Fuse Rating**	30A

Packaging Information

Modules Per Pallet	36 pcs/pallet	**Per Container**	16 pallet/container, 576 pcs/ 40'HQ container

Electrical Performance Parameters

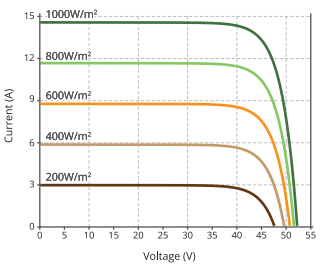
Model Type		**OPA-HBDW580-182(72)**			**OPA-HBDW585-182(72)**			**OPA-HBDW590-182(72)**			**OPA-HBDW595-182(72)**			**OPA-HBDW600-182(72)**		
Testing Condition		**STC**	**NMOT**	**BNPI**	**STC**	**NMOT**	**BNPI**	**STC**	**NMOT**	**BNPI**	**STC**	**NMOT**	**BNPI**	**STC**	**NMOT**	**BNPI**
Nominal Max. Power	P_{MAX} (W)	580	437	639	585	441	645	590	445	650	595	449	655	600	453	660
Max. Power Voltage	V_{MP} (V)	42.75	40.17	42.84	42.89	40.32	42.98	43.04	40.47	43.11	43.18	40.62	43.25	43.33	40.77	43.39
Max. Power Current	I_{MP} (A)	13.57	10.88	14.94	13.64	10.94	15.02	13.71	11.00	15.08	13.78	11.06	15.15	13.85	11.12	15.22
Open Circuit Voltage	V_{OC} (V)	51.43	48.85	51.42	51.63	49.04	51.62	51.83	49.23	51.82	52.03	49.42	52.02	52.23	49.61	52.22
Short Circuit Current	I_{SC} (A)	14.33	11.56	15.82	14.39	11.61	15.89	14.45	11.66	15.95	14.51	11.70	16.02	14.57	11.75	16.09
Module Efficiency	(%)		22.45			22.65			22.84			23.03			23.23	

* STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5; NMOT: Irradiance 800W/m², Ambient Temperature 20°C, Air Mass AM1.5, Wind Speed 1m/s; Power measurement tolerance ±3%.

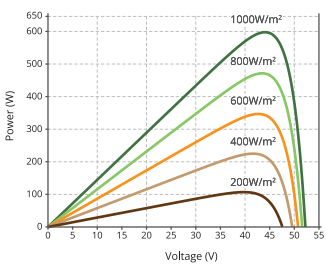
Bifacial Output-rearside Power Gain

5%	**Maximum Power**	P_{MAX} (W)	609	614	620	625	630
	Module Efficiency	(%)	23.57	23.78	23.98	24.18	24.39
10%	**Maximum Power**	P_{MAX} (W)	638	644	649	655	660
	Module Efficiency	(%)	24.70	24.91	25.12	25.34	25.55
25%	**Maximum Power**	P_{MAX} (W)	725	731	738	744	750
	Module Efficiency	(%)	28.07	28.31	28.55	28.79	29.03

Current-Voltage Curve (600W)



Power-Voltage Curve (600W)



Data contained in these specifications is subject to change without notice.

OAKRIDGE POWER LLC

Address: 7901 South Fwy, Fort Worth, TX 76134 | Website: www.oakridge-power.com | LinkedIn: Oakridge Power