APEX SOLAR

108cells Monocrystalline Bifacial Dual Glass Module

APEX-108HBD 395-420M10

21.51%

Maximum Module Efficiency

420W

Maximum Power Output

Power Tolerance:0-3W

1724×1134×30mm

Module Dimensions

0-3W

Guaranteed 0-3W positive tolerance ensures the power output reliability

High customer value

Lower cost per kilowatt hour.High quality silicon wafer guarantee,high power module output, excellent cost performance advantage,is an ideal choice for solar power stations

Highly reliable due to stringent quality control

Three times strict EL testing beyond certification requirements

Fusion of MBB and half-cut cells technology

The new circuit design, minimizes the impact of shadow on the power generation of solar module.Excellent light utilization and current collection capacity, effectively improve product power output and reliability

Excellent Anti-PID performance

Ensure that the scale production passes the PID test, and greatly reduce he attenuation caused by PID by optimizing the wafer process

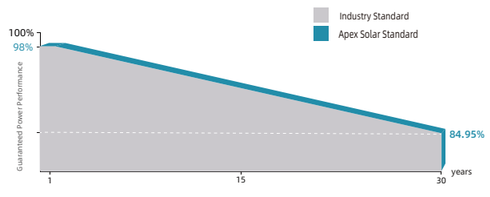
Outstanding low light performance

The coated glass with high transmittance and the surface technology of the wafer are used to achieve excellent performance in low light environment

IEC 61215 / IEC 61730
Fire safty class:Class A according to UL790
ISO 9001 :Quality Management System
ISO 14001 :Environment Management

Industry Leading Linear Power Warranty

25-year Warranty for Materials and Processing .30-year Warranty for Extra Linear Power Output



25 YEARS Process Warranty 30 YEARS Power Warranty

High Efficiency Half-cells Solar Panel APEX-108HBD 395-420M10

ELECTRICAL PARAMETERS AT STC

Rated Maximum Power(Pmax) [W]	395	400	405	410	415	420
Maximum Power Voltage(Vmp) [V]	30.84	31.02	31.23	31.45	31.64	31.82
Maximum Power Current(Imp) [A]	12.81	12.90	12.97	13.04	13.12	13.20
Open Circuit Voltage(Voc) [V]	36.98	37.07	37.19	37.32	37.45	37.58
Short Circuit Current(Isc) [A]	13.70	13.79	13.87	13.95	14.02	14.10
Module Efficiency [%]	20.23	20.48	20.74	21.00	21.25	21.51

STC: Irradiance 1000 W/m2 module temperature 25°C AM=1.5

ELECTRICAL PARAMETERS AT NMOT

Rated Maximum Power(Pmax)[W]	298	302	306	310	314	318
Maximum Power Voltage(Vmp) [V]	34.75	34.88	35.12	35.23	35.37	35.50
Maximum Power Current(Imp) [A]	29.08	29.26	29.47	29.72	29.89	30.09
Open Circuit Voltage(Voc) [V]	10.96	11.03	11.10	11.16	11.22	11.29
Short Circuit Current(Isc) [A]	10.25	10.32	10.38	10.43	10.50	10.57

NMOT: Irradiance 800 W/m2 ambient temperature 20°C wind speed: 1m/s

BIFACIAL OUTPUT-REARSIDE POWER GAIN

5%	Maximum Power (Pmax) [W]	415	420	425	431	436	441
	Module Efficiency STC[%]	21.24	21.51	21.78	22.05	22.31	22.58
10%	Maximum Power (Pmax) [W]	435	440	446	451	457	462
	Module Efficiency STC[%]	22.25	22.53	22.81	23.10	23.38	23.66
20%	Maximum Power (Pmax) [W]	474	480	486	492	498	504
	Module Efficiency STC[%]	24.27	24.58	24.89	25.20	25.50	25.81

MECHANICAL SPECIFICATION

Cell Type	Monocrystalline
C ell Dimensions	182×182mm
Cell Arrangement	108(6×18)
Weight	21.5kg(±3%)
Module Dimensions	1724×1134×30mm
Cable	4.0 mm²positive/negative:300mm(11.8inches),length Can be customized
Front Glass	2.0 mm (0.08 inches), High Transmission, ARCoated Heat Strengthened Glass
Back Glass	2.0 mm (0.08 inches), Heat Strengthened Glass (White Grid Glass)
Frame	Anodized aluminium alloy
Junction Box	Protection class IP68
Connector	Mc4 Compatible
Mechanical Load	Front side 5400Pa/Rear side 2400Pa

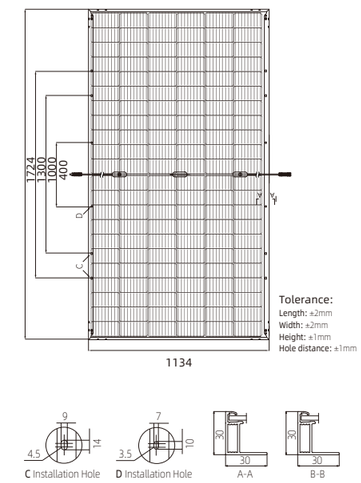
OPERATING CONDITIONS

Maximum System Voltage (V)	1000/1500VDC (IEC)
Pmax Temperature Coefficient	-0.34%/°C
Voc Temperature Coefficient	-0.28%/°C
ISC Temperature Coefficient	+0.05%/°C
Nominal Operating Cell Temperature	45±2°C
Operating Temperature	- 40°C-+85°C
Maximum Series Fuse	25A

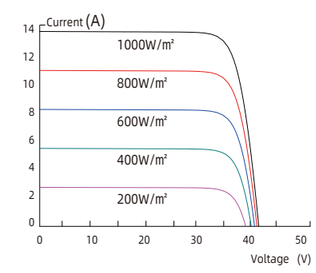
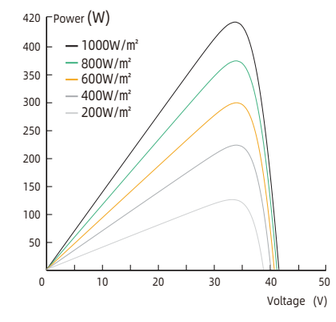
PACKING CONFIGURATION

Quantity/Pallet	37pcs/pallet
Quantity/Container	962pcs/40HQ

Module Dimension(mm)



Current-Voltage Curve (420W)



Power-Voltage Curve (420W)