

156cells Monocrystalline Bifacial
Dual Glass Module

APEX-156HBD-
N610-N640M10

N-TOPCon Technology

22.89%

Maximum Module Efficiency

640W

Maximum Power Output

Power Tolerance:0-3W

2465×1134×35mm

Module Dimensions

IEC 61215 / IEC 61730

Fire safty class:Class C according to UL790

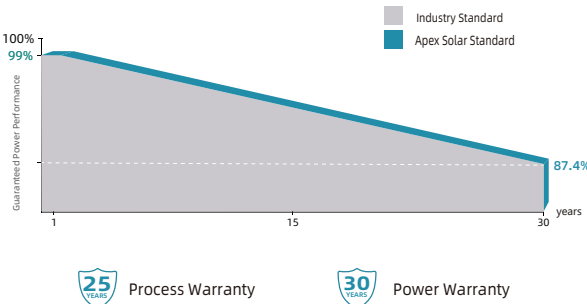
ISO 9001 :Quality Management System

ISO 14001 :Environment Management



Industry Leading Linear Power Warranty

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



High Efficiency Half-cells Solar Panel APEX-156HBD-N610-N640M10

ELECTRICAL PARAMETERS AT STC

Rated Maximum Power(Pmax) [W]	610	615	620	625	630	635	640
Maximum Power Voltage(Vmp) [V]	45.59	45.69	45.79	45.92	46.26	46.42	46.52
Maximum Power Current(Imp) [A]	13.38	13.46	13.54	13.61	13.62	13.68	13.76
Open Circuit Voltage(Voc) [V]	55.25	55.40	55.55	55.70	55.86	56.01	56.15
Short Circuit Current(Isc) [A]	14.11	14.18	14.25	14.32	14.35	14.48	14.54
Module Efficiency [%]	21.82	22.00	22.18	22.36	22.53	22.71	22.89

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

ELECTRICAL PARAMETERS AT NMOT

Rated Maximum Power(Pmax)[W]	459	462	466	470	472	476	480
Maximum Power Voltage(Vmp) [V]	42.28	42.39	42.50	42.61	42.72	42.82	42.92
Maximum Power Current(Imp) [A]	10.85	10.91	10.97	11.03	11.09	11.11	11.18
Open Circuit Voltage(Voc) [V]	52.48	52.62	52.77	52.91	53.05	53.66	53.96
Short Circuit Current(Isc) [A]	11.39	11.45	11.50	11.56	11.62	11.68	11.72

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

BIFACIAL OUTPUT-REARSIDE POWER GAIN

5%	Maximum Power (Pmax) [W]	641	646	651	656	662	667	672
	Module Efficiency STC[%]	22.91	23.10	23.29	23.48	23.66	23.86	24.04
10%	Maximum Power (Pmax) [W]	671	677	682	688	693	698	704
	Module Efficiency STC[%]	24.00	24.20	24.40	24.59	24.79	24.97	25.18
20%	Maximum Power (Pmax) [W]	732	738	744	750	756	762	768
	Module Efficiency STC[%]	26.19	26.40	26.62	26.83	27.05	27.26	27.47

MECHANICAL SPECIFICATION

Cell Type	N-Type Monocrystalline
C ell Dimensions	182×182mm
Cell Arrangement	156(2×78)
Weight	34.6kg(±3%)
Module Dimensions	2465×1134×35mm
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

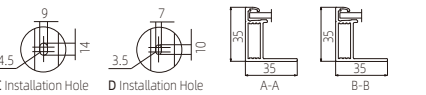
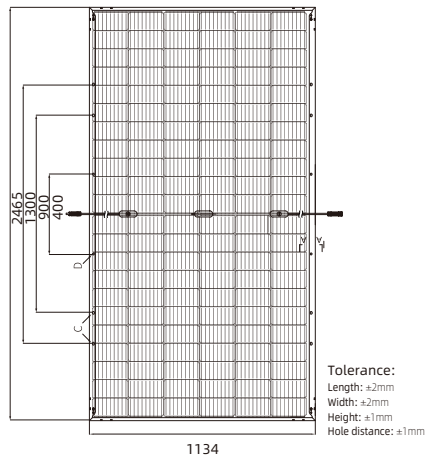
OPERATING CONDITIONS

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	30A

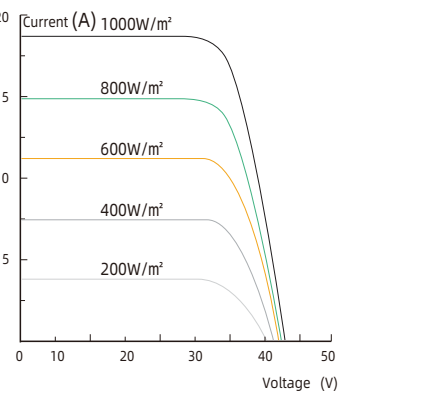
PACKING CONFIGURATION

Quantity/Pallet	36pcs/pallet
Quantity/Container	720pcs/40HQ

Module Dimension(mm)



Current-Voltage Curve (640W)



Power-Voltage Curve (640W)

