

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 | 474 | 476 | 448 |
| 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

MECHANICAL SPECIFICATION

| | |
|-------------------|---|
| Cell Type | N-Type Monocrystalline |
| Cell Dimensions | 182x182mm |
| Cell Arrangement | 156(2x78) |
| Weight | 30.6kg(±3%) |
| Module Dimensions | 2465x1134x35mm |
| Cable | 4.0 mm ² positive/negative:300mm(11.8inches),length Can be customized |
| Front Glass | 3.2 mm high transmittance,AR coating tempered glass |
| Frame | Anodized aluminium alloy |
| Junction Box | Protection class IP68 |
| Type of Connector | PV-XT101.1 (Suzhou Xtong Photovoltage Technology Co., Ltd) |
| Mechanical Load | Front side 5400Pa/Rear side 2400Pa |

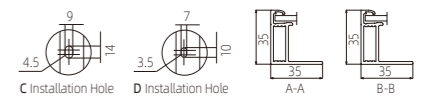
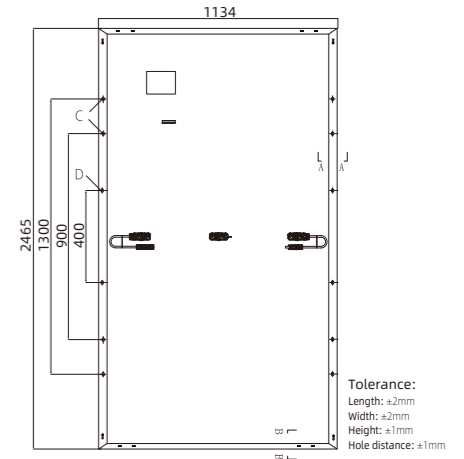
OPERATING CONDITIONS

| | |
|------------------------------------|--------------------|
| 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 | 31pcs/pallet |
| Quantity/Container | 558pcs/40HQ |

Module Dimension(mm)



APEX-156H-N610-N640M10

N-TOPCon Technology

22.89%

Maximum Module Efficiency

640W

Maximum Power Output

Power Tolerance:0-3W

2465x1134x35mm

Module Dimensions

IEC 61215 / IEC 61730

Fire safety class:Class C according to UL790

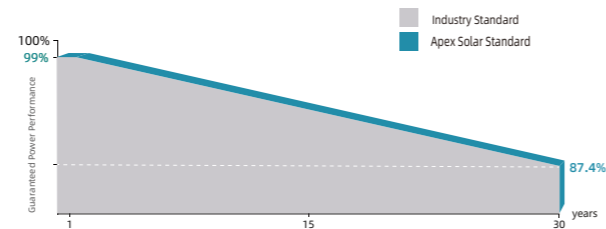
ISO 9001 :Quality Management System

ISO 14001 :Environment Management



Industry Leading Linear Power Warranty

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



25 Year Process Warranty

30 Year Power Warranty



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

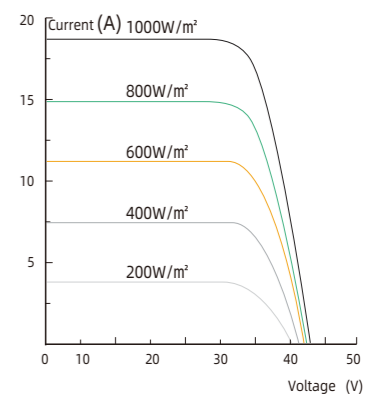
Ensure that the scale production passes the PID test, and greatly reduce the attenuation caused by PID by optimizing the wafer process



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

Current-Voltage Curve (640W)



Power-Voltage Curve (640W)

