

Mono PERC 210mm 256 Cells

# TH(400-420)PM6-43SB Full Black

400/405/410/415/420 WP



## Better appearance

- Full-black tone makes the modules blend perfectly with the building roof, ideal for residential roofs and BIPVs
- Cleaner and more aesthetic than traditional modules and complements your home's architectural style
- The new layout design is uniform overall, and the vision is extremely beautiful



## High customer value

- Lower LCOE (Levelized Cost Of Energy), reduced BOS (Balance Of System) cost, shorter payback time
- Lower guaranteed first year and annual degradation
- Designed for compatibility with existing mainstream system components
- Higher return on Investment



## High energy yield

- Excellent IAM (Incident Angle Modifier) and low irradiation performance, validated by 3rd party certifications
- The unique design provides optimized energy production under inter-row shading conditions



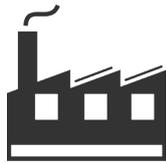
## High reliability

- Minimized micro-cracks with innovative non-destructive cutting technology
- Ensured PID resistance through cell process and module material control
- Resistant to harsh environments such as salt, ammonia, sand, high temperature and high humidity areas
- Mechanical performance up to 5400 Pa positive load and 2400 Pa negative load
- Class-C fire safety test passed

## APPLICATIONS >>



On-grid residential roof-tops



On-grid commercial/ industrial roof-tops



## MAXIMUM EFFICIENCY

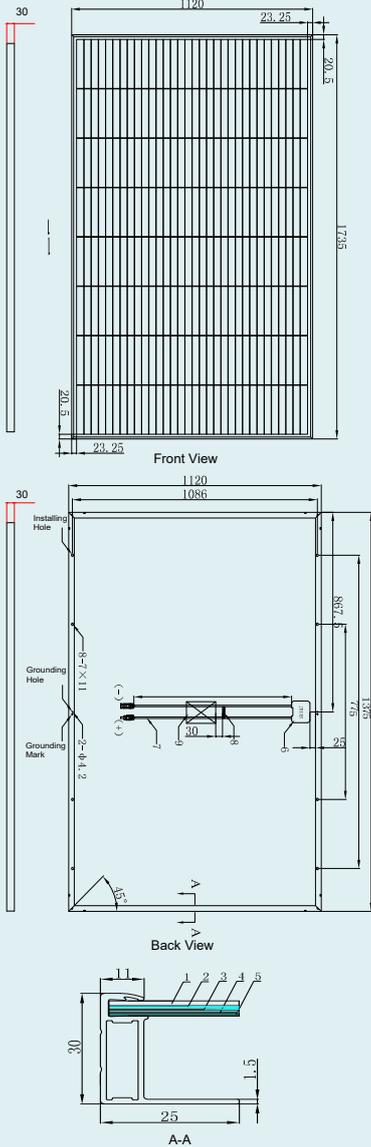
# 21.6%

## POSITIVE POWER TOLERANCE

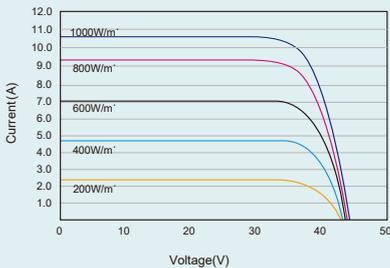
# 0 ~ +5W



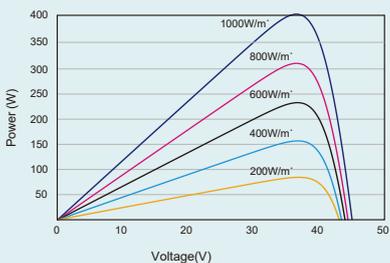
### DIMENSIONS OF PV MODULE(mm)



### I-V CURVES OF PV MODULE(400W)



### P-V CURVES OF PV MODULE(400W)



### ELECTRICAL DATA (STC)

Parameter	400	405	410	415	420
Peak Power Watts-P <sub>MAX</sub> (Wp)*	400	405	410	415	420
Power Tolerance-P <sub>MAX</sub> (W)	0 ~ +5				
Maximum Power Voltage-V <sub>MPP</sub> (V)	35.75	35.95	36.15	36.33	36.5
Maximum Power Current-I <sub>MPP</sub> (A)	11.19	11.27	11.35	11.43	11.51
Open Circuit Voltage-V <sub>OC</sub> (V)	42.35	42.55	42.75	42.9	43.05
Short Circuit Current-I <sub>SC</sub> (A)	11.87	11.92	11.96	12.01	12.05
Module Efficiency η <sub>m</sub> (%)	20.6	20.85	21.1	21.35	21.6

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5. \*Measuring tolerance: ±3%.

### ELECTRICAL DATA (NOCT)

Parameter	303	307	310	314	318
Maximum Power-P <sub>MAX</sub> (Wp)	303	307	310	314	318
Maximum Power Voltage-V <sub>MPP</sub> (V)	33.5	33.69	33.87	34.04	34.2
Maximum Power Current-I <sub>MPP</sub> (A)	9.01	9.07	9.14	9.20	9.27
Open Circuit Voltage-V <sub>OC</sub> (V)	39.85	40.04	40.23	40.37	40.51
Short Circuit Current-I <sub>SC</sub> (A)	9.55	9.59	9.63	9.67	9.70

NOCT: Irradiance at 800W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1m/s.

### MECHANICAL DATA

Solar Cells	Monocrystalline
Cell Orientation	256 cells
Module Dimensions	1735×1120×30 mm (68.31×44.09×1.18 inches)
Weight	21.4 kg
Glass	3.2 mm (0.13 inches), High Transmission, AR Coated Heat Strengthened Glass
Encapsulant Material	EVA/POE
Backsheet	Black
Frame	30 mm(1.18 inches) Black, anodized aluminium alloy
J-Box	IP 68 rated (3 bypass diodes)
Cables	Photovoltaic Technology Cable 4.0mm <sup>2</sup> (0.006 inches <sup>2</sup> ) Portrait: N 900mm/P 900mm(35.43/35.43 inches) Length can be customized
Connector	MC4 Compatible

\*Please refer to regional datasheet for specified connector.

### TEMPERATURE RATINGS

NOCT(Nominal Operating Cell Temperature)	43°C (±2°C)
Temperature Coefficient of P <sub>MAX</sub>	- 0.34%/°C
Temperature Coefficient of V <sub>OC</sub>	- 0.25%/°C
Temperature Coefficient of I <sub>SC</sub>	0.04%/°C

### MAXIMUM RATINGS

Operational Temperature	- 40 ~ +85°C
Maximum System Voltage	1500V DC (IEC)
	1000V DC (IEC)
Max Series Fuse Rating	20A

### WARRANTY

- 15 year Product Workmanship Warranty
- 25 year Power Warranty
- 2.5% first year degradation
- 0.5% Annual Power Attenuation

\*Please refer to product warranty for details.

### PACKAGING CONFIGURATION

- Modules per pallet: 37 pieces
- Modules per 40' container: 962 pieces

