

N⁺SERIES

SUN210THCD640-60

615~640W
MAXIMUM POWER OUTPUT

22.61%
MAX MODULE EFFICIENCY

0~+5W
POWER TOLERANCE

< 1%
FIRST YEAR POWER DEGRADATION

< 0.40%
YEAR 2~30 POWER DEGRADATION

BIFACIAL MODULE

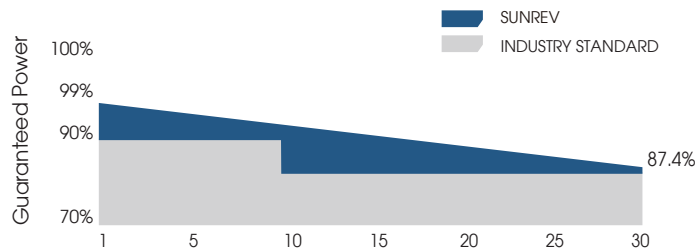
N-Type

IEC 61215(2016), IEC 61730(2016)

ISO 9001:2015: Quality management system

ISO 14001:2015: Environment System

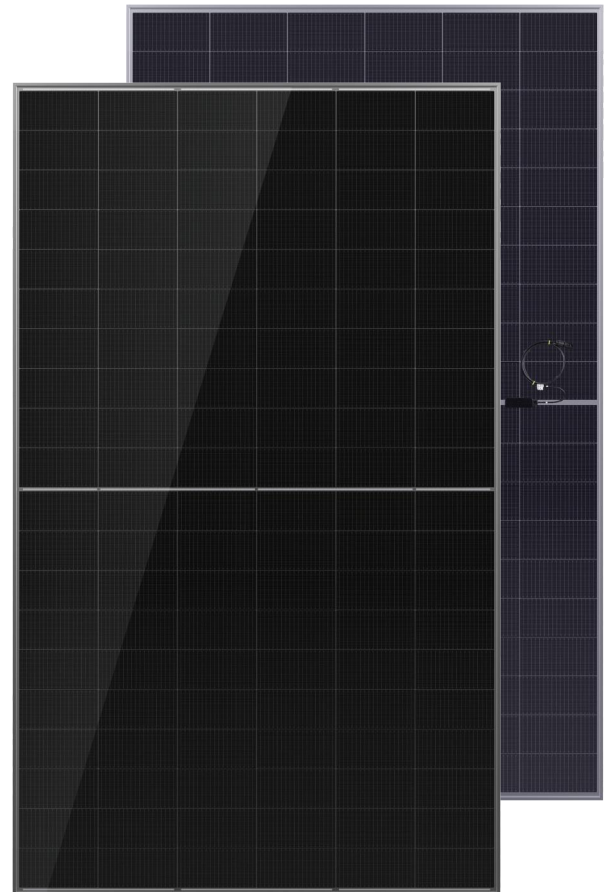
ISO 45001:2018: Occupational health management systems



12-Year Warranty for Materials and Processing

30-Year Warranty for Extra Linear Power Output

0.40% Annual Degradation Over 30 years



PRODUCT FEATURES



SMBB Technology Half Cut Topcon Cell

Better light trapping and current collection to improve module power output and reliability.



Excellent Low-light Performance

Better performance under shading effect.



PID Resistance

Excellent Anti-PID performance guarantee via optimized mass-production process and materials control.



HOT 2.0 Technology

The N-type module with Hot 2.0 technology has better reliability and lower LID/LETID

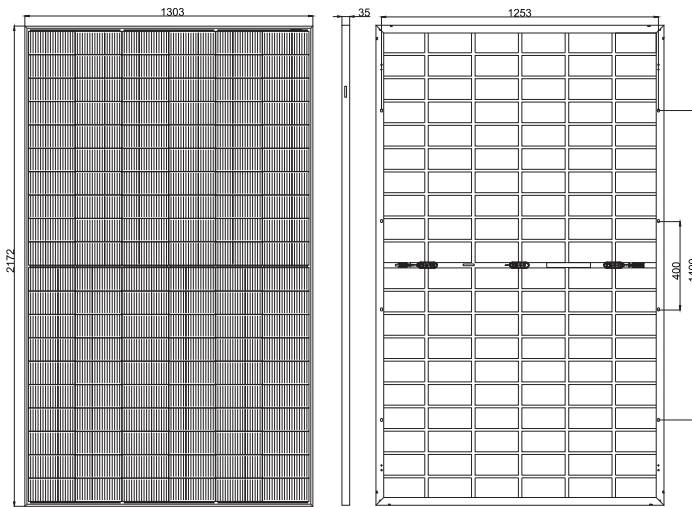


Enhanced Mechanical Load

Certified to withstand: wind load (2400Pa) and snow load (5400Pa).



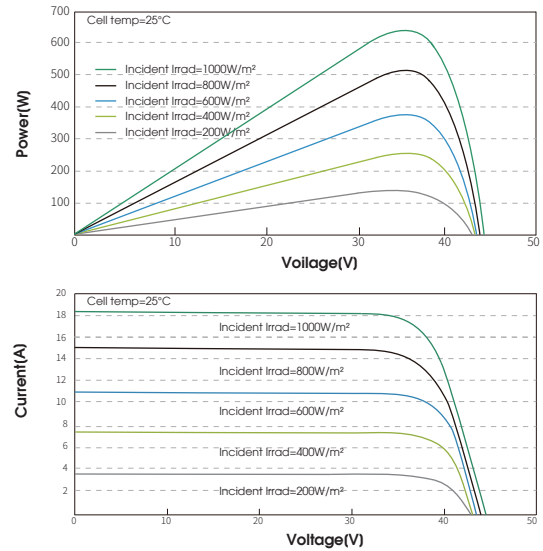
Drawing Information



Packaging Configuration

Per Pallet	31 Pcs
Container	40'HQ
Pcs/Container	558

I-V Curve



Mechanical Parameters

Cell Type	N type Mono-crystalline
No. of cells	120(6x20)
Dimensions	2172x1303x35mm
Weight	35kg
Front Glass	2.0mm, Anti-Reflection Coating
Back Glass	2.0mm, Heat Strengthened Glass
Frame	Anodized Aluminum Alloy Frame
Junction Box	IP68 Rated / 3 Diodes
Output Cables	4.0mm²/+450mm -250mm, or Customized Length

SPECIFICATIONS

Module Type	210THCD615-60		210THCD620-60		210THCD625-60		210THCD630-60		182THCD635-60		182THCD640-60	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power(Pmax/W)	615	465	620	469	625	473	630	476	635	476	640	480
Maximum Power Voltage(Vmp/V)	35.70	33.70	35.90	33.90	36.10	34.10	36.30	34.30	36.5	34.50	36.7	34.70
Maximum Power Current(Imp/A)	17.23	13.81	17.28	13.84	17.32	13.88	17.36	13.89	17.40	13.92	17.44	13.95
Open-circuit Voltage(Voc/V)	42.90	40.50	43.10	40.70	43.30	40.90	43.50	41.10	43.70	41.30	43.90	41.50
Short-circuit Current(Isc/A)	18.20	14.58	18.27	14.64	18.33	14.69	18.39	14.71	18.45	14.76	18.51	14.81
Module Efficiency(%)	21.73%		21.91%		22.08%		22.26%		22.43%		22.61%	
Operating Temperature(°C)	-40°C~+85°C											
Maximum system voltage	DC 1000V/1500V											
Maximum series fuse rating	30A											
Power tolerance	0~+5W											
Temperature coefficients of Pmax	-0.25%/°C											
Temperature coefficients of Voc	-0.29%/°C											
Temperature coefficients of Isc	0.04%/°C											
Nominal operating cell temperature(NOCT)	45±2°C											

*STC: Irradiance 1000W/m²

Cell Temperature 25°C

AM=1.5

*NOCT: Irradiance 800W/m²

20°C ambient temperature

AM=1.5

Wind Speed 1m/s

