



CHN-650-NRC-SG

Monocrystalline Module
Single Glass

625W-650W

650W

Maximum Power
Output

24.10%

Maximum Module
Efficiency

0~+3%

Power Output
Guarantee

TOPCON



16BB(182*210mm)

● FIRE CLASS C

Fire protection through single glazing according to safety requirements

● REINSURANCE COVERAGE

Taoistic is reinsured for 25 years of performance guarantee



High quality silicon wafers guarantee high power module output and excellent cost-effectiveness, making it an ideal choice for large power plants



Selected packaging materials and strict process plans to ensure component PID resistance



Lower oxygen and carbon content leads to lower LID



Adapt to harsh outdoor environments through weather resistance tests such as sand and dust, salt spray, and ammonia gas



The design of series and parallel connection reduces the series resistance R_s of components, reduces internal electrical performance losses, and improves the power generation capacity of the system end



Our company has concluded a reinsurance agreement with Ariel Re - Lloyd's syndicate 1910. Please see <http://verification.arielre-cleanenergy.com>

Deliver Reliable Performance Over Time

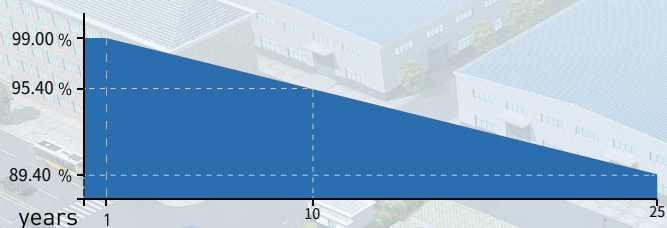
- manufacturer of crystalline silicon photovoltaic modules
- Fully automatic facility and world-class technology
- Rigorous quality control to meet the highest standard: ISO9001:2015, ISO14001: 2015 and ISO 45001:2008
- Tested for harsh environments (salt mist, ammonia corrosion, sand blowing test, and PID test: IEC 61701, IEC 62716)
- Long term reliability tests
- 2x100% EL inspection ensuring defect-free modules

WARRANTY

12 years product warranty

25 years performance warranty

Linear Performance Warranty



12 Years Product Warranty 25 Years Linear Power Warranty

* Please refer to standard warranty for details

Product Certification



625W-650W

Maximum Power	P _{max} [W]	625	630	635	640	645	650
Maximum Power Voltage	V _{mp} [V]	41.70	42.00	42.30	42.50	42.80	43.10
Maximum Power Current	I _{mp} [A]	15.00	15.01	15.02	15.05	15.07	15.09
Open Circuit Voltage	V _{oc} [V]	49.90	50.20	50.50	50.80	51.10	51.40
Short Circuit Current	I _{sc} [A]	15.92	15.94	15.97	16.00	16.03	16.06
Module Efficiency	[%]	23.20	23.30	23.50	23.70	23.90	24.10
Power Output Tolerance	[W]	0~+3%					

		475	479	483	487	491	495
Maximum Power	$P_{max}[W]$						
Maximum Power Voltage	$V_{mp}[V]$	38.70	39.00	39.30	39.60	39.90	40.20
Maximum Power Current	$I_{mp}[A]$	12.30	12.31	12.32	12.33	12.34	12.35
Open Circuit Voltage	$V_{oc}[V]$	47.50	47.80	48.10	48.40	48.70	49.00
Short Circuit Current	$I_{sc}[A]$	12.75	12.78	12.81	12.84	12.87	12.90

Number of Cells	132pieces [6×22]
Dimensions of Module L*W*H (mm)	2382×1134×30mm
Weight (kg)	Approx 30.7kg
Front Side Glass	3.2mm, Anti-reflection coating glass
Backsheet	White
Frame	Anodized aluminium
J-Box	Protectionlevel IP68
Cable	4.0mm ² ,300mm
Number of diodes	3
Wind/Snow Load	2400 Pa/5400 pa*
Connector	MC4 compatible or MCcompatible

Nominal Operating Cell Temperature (NOCT)	$44 \pm 2^{\circ}\text{C}$
Temperature Coefficient of Isc	$+0.046\%/^{\circ}\text{C}$
Temperature Coefficient of Voc	$-0.250\%/^{\circ}\text{C}$
Temperature Coefficient of P _{MAX}	$-0.300\%/^{\circ}\text{C}$

Operational Temperature	- 40~+85°C
Maximum System Voltage	1500V DC-[H]
Max Series Fuse Rating	35A

Module per box	36 pieces
Module per 17.5 flatcar	828 pieces
Module per 40 container	720 pieces

Connector	Original MC
Cable length	1200mm
Frame	Black
Backsheet	Black

[illegible]

Figure 10 is a line graph showing Power (W) on the y-axis (ranging from 0 to 700) versus Voltage (V) on the x-axis (ranging from 0 to 50). The temperature is constant at 25°C. Five curves are plotted for different electron densities (n_e):

- 10000/ m^3 (Red line): Peaks at approximately 620 W at 40 V.
- 8000/ m^3 (Green line): Peaks at approximately 480 W at 40 V.
- 6000/ m^3 (Purple line): Peaks at approximately 380 W at 40 V.
- 4000/ m^3 (Blue line): Peaks at approximately 240 W at 40 V.
- 2000/ m^3 (Grey line): Peaks at approximately 110 W at 40 V.

All curves show a characteristic peak followed by a sharp drop in power as voltage increases beyond the peak point.