



PHONO



575-595w

Draco Module Series

N-TOPCON HIGH EFFICIENCY 144-16BB-W-WG

Bloomberg
NEW ENERGY FINANCE

Tier1



Extraordinary Product Performance

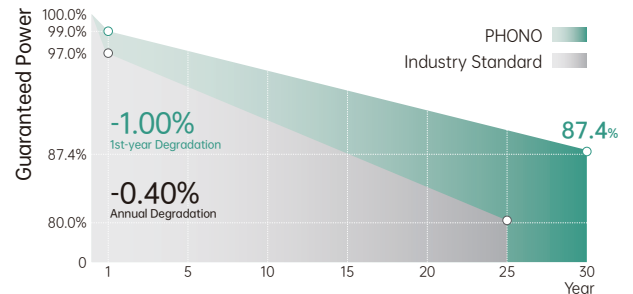
- Up to 30% additional power yield benefited from bifacial technology and up over 80% cell bifaciality
- Competitive high-temperature performance with ameliorated temperature coefficient
- Better weak illumination response, higher power generation with N-TOPCon technology

Higher Quality Reliability

- N-type with lower LID and LeTID
- Industry-leading cell processing technology and dual glass contributes to excellent anti-PID characteristic
- First-year degradation is less than 1.0%, with linear degradation of 0.4% per year for 30 years

Wider Application Conditions

- BIPV, vertical installation, snowfield, high-humid area, windy and dusty area
- Safer and easier handling during transportation and installation



15-year
Product Warranty

30-year
Linear Performance Warranty

MANAGEMENT SYSTEM CERTIFICATES

IEC 61215, IEC 61730

ISO 9001
2015 / Quality management system

ISO 14001
2015 / Standards for environmental management system

ISO 45001
2018 / International standards for occupational health & safety



Electrical Typical Values

Model	1000V	PS575M8GF-24/TNH		PS580M8GF-24/TNH		PS585M8GF-24/TNH		PS590M8GF-24/TNH		PS595M8GF-24/TNH	
	1500V	PS575M8GFH-24/TNH		PS580M8GFH-24/TNH		PS585M8GFH-24/TNH		PS590M8GFH-24/TNH		PS595M8GFH-24/TNH	
Testing Condition		STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Rated Power (Pmpp)		575	440	580	444	585	448	590	452	595	456
Rated Current (Imp)		13.36	10.76	13.42	10.81	13.48	10.86	13.54	10.91	13.60	10.95
Rated Voltage (Vmpp)		43.04	40.92	43.22	41.09	43.40	41.26	43.58	41.43	43.75	41.59
Short Circuit Current (Isc)		14.04	11.31	14.11	11.36	14.18	11.42	14.25	11.48	14.32	11.53
Open Circuit Voltage (Voc)		51.97	49.76	52.20	49.98	52.44	50.21	52.68	50.44	52.92	50.67
Module Efficiency (%)		22.26		22.45		22.65		22.84		23.03	

STC(Standard Testing Conditions): Irradiance 1000W/m², AM 1.5, Cell Temperature 25°C

NOCT (Nominal Operation Cell Temperature): Irradiance 800W/m², Ambient Temperature 20°C , Spectra at AM1.5, Wind at 1m/s

BNPI

Maximum Power (Pmax)	633	639	644	650	655
Optimum Operating Current (Imp)	14.71	14.97	14.84	14.92	14.98
Optimum Operating Voltage (Vmpp)	43.04	43.22	43.40	43.58	43.75
Short Circuit Current (Isc)	15.49	15.58	15.62	15.70	15.75
Open Circuit Voltage (Voc)	51.97	52.20	52.44	52.68	52.92

BNPI:Front Side Irradiation 1000W/m², Back Side Reflection Irradiation 135W/m², AM 1.5, Ambient Temperature 25°C

Mechanical Characteristics

Cell Type	N Type Monocrystalline
Dimension (L × W × H)	Length: 2278mm (89.69 inch)
	Width: 1134mm (44.65 inch)
	Height: 30mm (1.18 inch)
Weight	32.0kg (70.55 lbs)
Glass	2.0mm/2.0mm Heat Strengthened Glass
Frame	Anodized Aluminium Alloy
Cable (Including Connector)	4mm ² (IEC), (+): 350mm,(-): 250mm or Customized Length
Junction Box	IP 68 Rated

Temperature Ratings

Voltage Temperature Coefficient	-0.25%/°C
Current Temperature Coefficient	+0.04%/°C
Power Temperature Coefficient	-0.29%/°C
Power Tolerance	0~+3%
NOCT	42±2°C
Bifaciality	80±5%

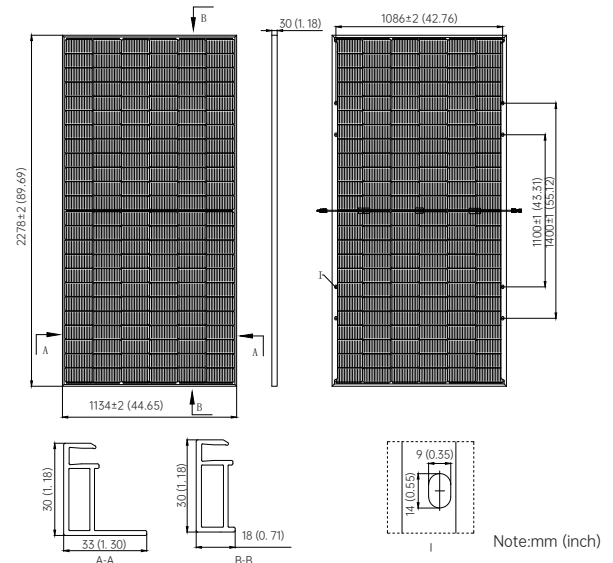
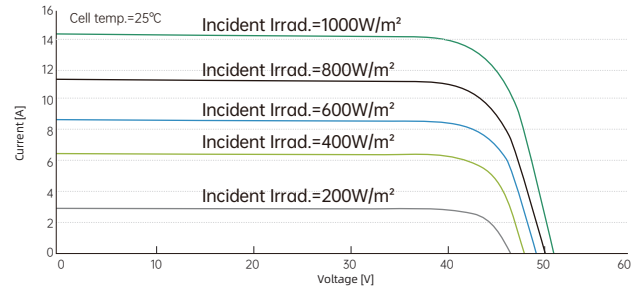
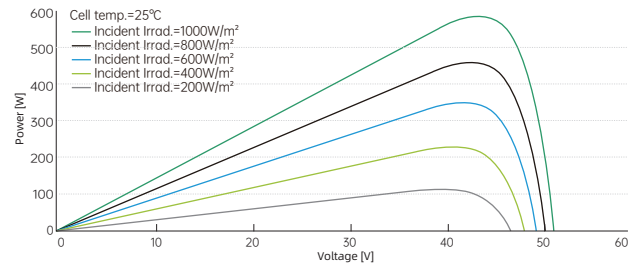
Absolute Maximum Rating

Operating Temperature	From -40 to + 85°C
Hail Diameter @ 80km/h	Up to 25mm
Front Side Maximum Static Loading	5400Pa
Rear Side Maximum Static Loading	2400Pa
Maximum Series Fuse Rating	30A
PV Module Classification	II
Fire Rating (IEC61730)	C
Maximum System Voltage	DC 1000V/1500V

Packing Configuration

Container	20' GP	40' HQ
Pieces/Container	180	720
Pcs/Pallet	36	36
Pallets/Container	5	20

Electrical Characteristics



SOLAR VARIATOR

MODEL	2.2KW		2.2KW	7.5KW	11KW
RATED OUTPUT POWER	2200 W(3HP) (supports 0.75~3HP water pump)		2200 W(3HP) (supports 0.75~3HP water pump)	7500 W(10HP) (supports 3~10HP water pump)	11000 W(15HP) (supports 10~15HP water pump)
PV INPUT (DC)					
Nominal DC Voltage / Maximum DC Voltage	320 VDC / 450 VDC		540 VDC / 800 VDC		
Start-up Voltage	120 VDC		250 VDC		
MPPT Voltage Range	120 VDC ~ 420 VDC		250 VDC ~ 780VDC		
Number of MPP Trackers	1				
AC INPUT					
Input Voltage	220/230/240 VAC (-15% ~ +10%)		N/A		
Input Frequency	47 Hz ~ 63 Hz				
OUTPUT					
Nominal Voltage	220/230/240 VAC		3 x 380/400/415/440 VAC		
Efficiency	> 97%		> 97%		
Nominal Output Current	14 A	10 A	5.0 A	15 A	22 A
Motor Type	Single-phase motor	Three-phase asynchronous motor	Three-phase asynchronous motor		
Frequency Precision	±0.2%				
PROTECTION					
Full Protection	Phase lost, dry pumping, motor locked, weak sunlight, over-voltage, under-voltage, over-current, surge, over-temperature and short circuit protection				
PHYSICAL					
Dimension, D X W X H (mm)	110 x 230 x 342				
Net Weight (kgs)	5	5.5	6	6.5	
IP Protection	IP20				
INTERACE					
Communication Port	RS-232/RS-485				
ENVIRONMENT					
Humidity	< 95% RH (Non-condensing)				
Operating Temperature	-20°C~45°C at 100% full load, 46°C~60°C power derating				

Product specifications are subject to change without further notice.

Recommended Solar Panel Selection

Below are popular solar panel specifications in the market:

- A. 75-A: 75W, Vmp=17.46V, Imp=4.3A, Voc=21.96V C. 140-A: 140W, Vmp=17.9V, Imp=7.82A, Voc=22.0V
 B. 75-B: 75W, Vmp=13.3V, Imp=5.64A, Voc=16.94V D. 250-A: 250W, Vmp=30.64, Imp=8.16A, Voc=37.38V

Inverter Model Solar Panel	2.2KW for single-phase output	2.2KW for three-phase output	2.2KW	7.5KW	11KW
PV Panel 75-A	19 pieces in Series x 4 Strings (5700W PV Panels)	19 pieces in Series x 2 Strings (2850W PV Panels)	32 pieces in Series (2400W PV Panels)	N/A	N/A
PV Panel 75-B	25 pieces in Series x 3 Strings (5625W PV Panels)	25 pieces in Series x 2 Strings (3750W PV Panels)	42 pieces in Series (3150W PV Panels)	N/A	N/A
PV Panel 140-A	19 pieces in Series x 2 Strings (5320W PV Panels)	19 pieces in Series (2660W PV Panels)	N/A	32 pieces in Series x 2 Strings (8960W PV Panels)	32 pieces in Series x 3 Strings (13440W PV Panels)
PV Panel 250-A	11 pieces in Series x 2 Strings (5500W PV Panels)	11 pieces in Series (2750W PV Panels)	N/A	19 pieces in Series x 2 Strings (9500W PV Panels)	19 pieces in Series x 3 Strings (14250W PV Panels)