PHONO



475-495w

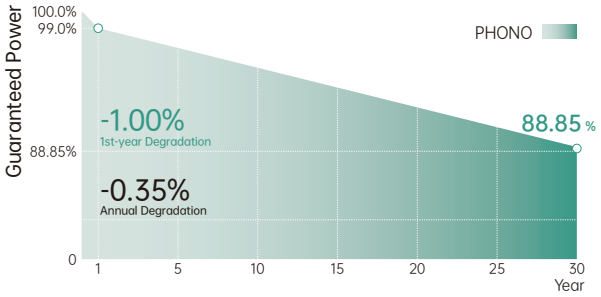
Quasar Module Series

N-BC HIGH EFFICIENCY 108-0BB-B-BG

Bloomberg NEW ENERGY FINANCE Tier 1 TOP PERFORMER 2024 kiwa PVEL PV MODULE RELIABILITY SCORECARD

Product Characteristics

- All back contact design enhances light absorption
- Aesthetic design in true black
- Optimized cell size brings higher power and lower transportation costs



15-year Product Warranty

30-year Linear Performance Warranty

Higher Quality Reliability

- Competitive high-temperature performance with ameliorated temperature coefficient
- Optimize power generation performance under partial shading conditions

Wider Application Conditions

- Universal solution for residential and C&I
- Easy for integration, designed for compatibility with existing mainstream inverters and diverse mounting systems

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

GL-EN-VERSION 2025.07.07 © PHONO SOLAR CO., LTD. ALL RIGHTS RESERVED

www.phonosolar.com / info@phonosolar.com

Electrical Typical Values

Model	PS475L7GFH-18/VBH		PS480L7GFH-18/VBH		PS485L7GFH-18/VBH		PS490L7GFH-18/VBH		PS495L7GFH-18/VBH	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Rated Power (Pmpp) W	475	361	480	365	485	369	490	373	495	377
Rated Current (Impp) A	14.31	11.47	14.41	11.55	14.51	11.63	14.61	11.71	14.71	11.79
Rated Voltage (Vmpp) V	33.20	31.47	33.32	31.60	33.43	31.73	33.54	31.85	33.66	31.98
Short Circuit Current (Isc) A	15.01	12.06	15.11	12.14	15.21	12.22	15.31	12.30	15.41	12.38
Open Circuit Voltage (Voc) V	40.11	37.93	40.27	38.10	40.42	38.27	40.56	38.34	40.72	38.60
Module Efficiency (%)	23.27		23.52		23.76		24.01		24.25	

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

Made in China. Measurement Tolerance at STC: Pmax±3%, Voc±3% and Isc±4%

Mechanical Characteristics

Cell Type	N Type BC
Dimension (L × W × H)	Length: 1800mm (70.87 inch) Width: 1134mm (44.65 inch) Height: 30mm (1.18 inch)
Weight	23.5kg (51.80 lbs)
Front Glass	2.0mm Heat Strengthened Glass
Back Glass	1.6mm Heat Strengthened Glass
Frame	Anodized Aluminium Alloy
Cable (Including Connector)	4mm² (IEC), (+): 400mm,(-): 200mm or Customized Length
Junction Box/ Connector	IP 68 Rated, Staubli PV-KST4-EVO2/xy_UR;PV-KBT4-EVO2/xy_UR PV-KST4-EVO2A/xy;PV-KBT4-EVO2A/xy

Temperature Ratings

Voltage Temperature Coefficient	-0.20%/°C
Current Temperature Coefficient	+0.05%/°C
Power Temperature Coefficient	-0.26%/°C
Power Tolerance	0~+5W
NOCT	45±2°C

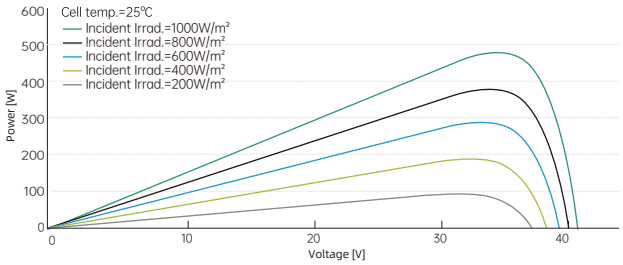
Absolute Maximum Rating

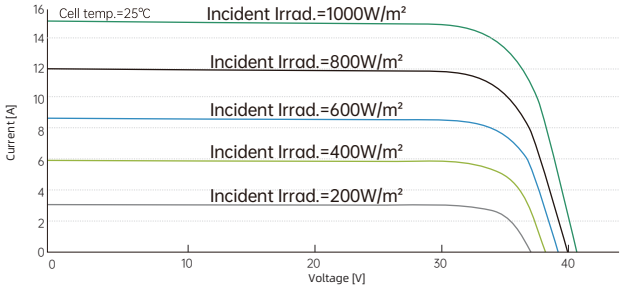
Operating Temperature	From -40 to + 85°C
Hail Diameter @ 80km/h	Up to 25mm
Front Side Maximum Static Loading	5400Pa
Rear Side Maximum Static Loading	2400Pa
Maximum Series Fuse Rating	30A
PV Module Classification	II
Fire Rating (IEC61730)	C
Maximum System Voltage	DC 1500V

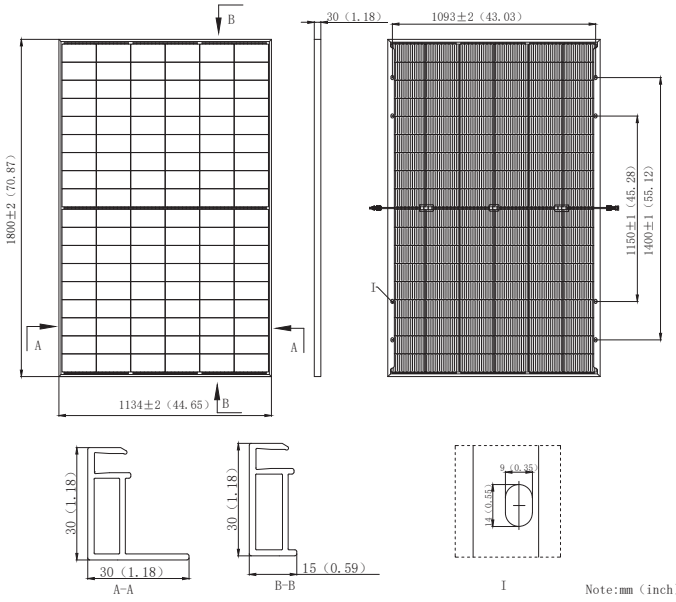
Packing Configuration

Container	40' HQ
Pieces/Container	864
Pcs/Pallet	36
Pallets/Container	24

Electrical Characteristics







PHONO

PHONO SOLAR TECHNOLOGY CO., LTD. reserves the right to make necessary adjustments to the information described herein at any time without further notice. The specifications and certificates contained in this datasheet may deviate slightly from our actual products due to the on-going innovation and product enhancement. Please be sure to use the most recent version of data.