Phono[®] Solar

AUSTRALIA

DIAMOND MODULE TECHNOLOGY

TWIN PUSSES SERIES

- 15 Year Product Warranty
- Outstanding Module Efficiency
- ✔ PID Resistant
- Better Performance Under Shading Effect
- Salt Mist Certified to the Highest Severity Level









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40+ YEARS OF EXPERIENCE

1978

business

Sumec starts

rts Phono Solar first sell solar panels in Australia

2010

Diamond Module Technology is pioneered

2018

Phono re-brands to Sumec Phono Solar

2019

Introduction of Market Leading 15 Year Product Warranty

2020

New facility opens for production

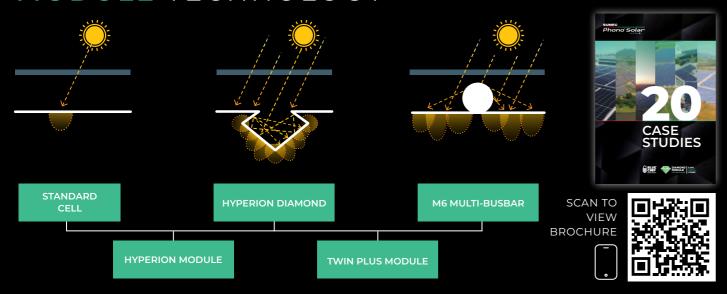
2021

Ranked as a PVEL Top Performing Panel for 2021

We have invested in a brand new, state of the art, manufacturing line and are proud to introduce our latest Diamond Module Technology and leading Warranty to the Australian market.

President Zhao, Sumec Phono Solar

ADVANCED **DIAMOND MODULE** TECHNOLOGY











MAKE A SECURE INVESTMENT

4 LAYERS OF PROTECTION

In 2013 there were more than 400 Solar Panel Manufacturers approved for

install in Australia and today there are fewer than 100.

SUMEC were founded over 40 years ago. We understand a warranty is only as strong as the company behind it.

As a **Blue Chip brand**, Sumec Phono Solar has **longevity, commitment and stability** at every layer of protection. From the Fortune 500 Founding Corporation, through to the experienced Australian Distributor, **you can feel secure in your solar investment** for decades to come.



(a major division of the Sinomach Corporation)

Confidence of Longevity

- Sumec founded in 1978
- Sinomach Fortune Global 500



PHONO SOLAR

Market Leading Technology & Testing

- Founded by Sumec, Phono Solar now has a global presence with Offices and Manufacturing across Europe, Asia, North & South America.
- Bloomberg Tier 1 Brand Introduced in Australia in 2010
- · Australian Warranty Support and Representation

SUPPLY PARTNERS



Australian Technical Solar Distributor

- 100% Australian Grown and Owned
- Established in 2012 with a Solar Retail Background
- In partnership with Phono Solar for over 8 years
- · Only distribute high quality, low risk products from reputable manufacturers

CERTIFIED INSTALLER

Sumec Phono Solar is the Engineers' Choice

- Premium installers use Blue Chip Panels
- Sumec Phono Solar in conjunction with Supply Partners provide training and support to installers based in Australia and New Zealand
- Clean Energy Council Accredited Installation

CUSTOMER





455W 15 YEAR PRODUCT WARRANTY

<u>TWIN PLUS</u> SERIES

ELECTRICAL TYPICAL VALUES

Model	PS455M4-24/TH PS455M4H-24/TH	
Cell Type	Monocrystalline 166mm x 83mm	
Rated Power (Pmpp) ²	455W	
Tolerance	0~+5w	
Rated Current (Impp)	10.94	
Rated Voltage (Vmpp)	41.60	
Short Circuit Current (Isc)	11.47	
Open Circuit Voltage (Voc)	49.37	
Module Efficiency (%)	20.80	
NOCT (Nominal Operation Cell Temperature)	Temperature) 43°C ± 2°C	
Voltage Temperature Coefficient	-0.30%/°C	
Current Temperature Coefficient	+0.05%/°C	
Power Temperature Coefficient	-0.38%/°C	

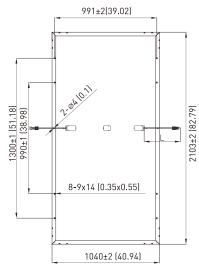
MECHANICAL CHARACTERISTICS

Dimensions	Length: 2103mm, Width: 1040mm Height: 35mm
Weight	25.0kg
Front Glass	3.2mm toughened glass
Frame	Anodised aluminium alloy
Cable	4mm² (IEC), 1250mm (incl.connector)
Junction Box	IP 68 rated
Connectors	Genuine MC4 (1000V) / MC4-EVO 2 (1500V)

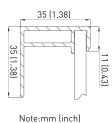
PACKING CONFIGURATION

Container	Pallet	20'GP	40'HQ
Pieces per container	31	255	682





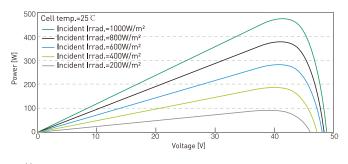
- 1. In compliance with our warranty terms and conditions.
- Measurement conditions under irradiance level of Standard Test Conditions (STC): Irradiance 1000W/ m², AM 1.5G, Cell Temperature 25°C.

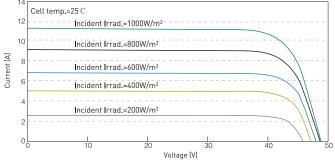


ABSOLUTE MAXIMUM RATING

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	20A	
PV Module Classification	II	
Fire Rating (IEC 61730)	С	
Maximum System Voltage	DC 1500V/1000V	

ELECTRICAL CHARACTERISTICS





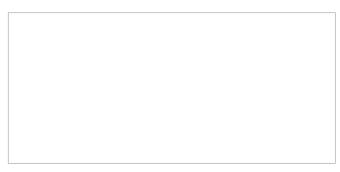




- 15 year product warranty
- 25-year linear performance warranty to 84.8%%
- 1. In compliance with our warranty terms and conditions.

NOTE: This datasheet is not legally binding. Phono Solar reserves the right to make specifications changes without notice.

Further information can be found on our website: www.phonosolar.com.au



Sumec Phono Solar modules are proudly manufactured in China.