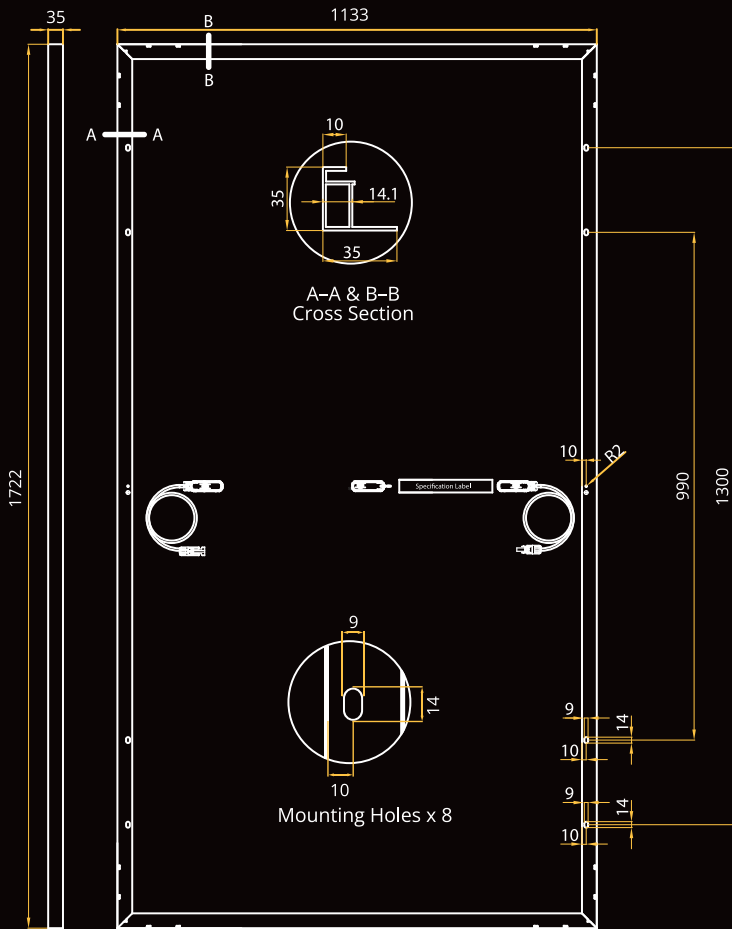


tindo walara 415G3P-BL



Electrical Characteristics

108HC Cell Module		Walara-415G3P-BL	
Item	Unit	STC	NMOT
Max. Power (Pmax)	Wp	415	316.4
Max. Power voltage (Vmp)	V	31.84	30.02
Max. Power current (Imp)	A	13.04	10.54
Open circuit voltage (Voc)	V	38.55	36.64
Short circuit current (Isc)	A	13.84	11.16
Module Efficiency	%	21.3	
Positive power tolerance	W	0 + ~ 5	
*STC (Standard Test Condition): 1,000 W/m2 , AM 1.5, 25°C			
**NMOT(Nominal Module Operating Temperature) : Irradiance at 800W/m, Ambient Temperature 20°C, Wind Speed 1m/s, air mass of AM1.5			
# Tolerance of Measuring Pmax, Voc & Isc ± 3% within each watt class at STC			

Mechanical Characteristics

Cells per panel	108 Half Cells
Cell Type	N-Type Cells (182x182mm)
Panel Dimension	1722 x 1133 x 35 mm
Panel Weight	22kg
Front Glass	3.2mm, Fully tempered Double ARC Glass
Frame	Anodized Aluminum Alloy (T6) / Black
Junction Box	3 bypass diodes / IP68 rated
Cable	1200 mm(+/-), 4mm ² or Customised Length
Connector Type	Stabli-MC4 / KST4-EVO 2(M), KBT4-EVO 2(F)

Thermal Characteristics

Operating Temperature		%	-40 ~ +85
Maximum System Voltage (IEC)		VDC	1500
Maximum Series Fuse Rating		A	30
Nominal Module Operating Temperature		°C	45 ± 2
Thermal Coefficient	Isc	%/°C	0.045
	Voc	%/°C	-0.25
	Pmax	%/°C	-0.32

Safety Ratings & Warranties

Safety Application Class	Class II
Fire Safety Classification	Class C
Certifications	IEC 61215, IEC 61730
Warranty	25 years limited product warranty
Performance Guarantee	25 years limited warranty 87.4% power

Qualification Test

Thermal cycling test	-40°C to 85°C for 200 cycles
Damp heat test	85°C and 85% relative humidity for 1000 hr
Front Load test	5400Pa
Rear Load test	2400Pa
Hail Impact test	25mm hail at 23m/s from 1m distance
Cyclone tested by Structural Engineering Consultants Australia Pty Ltd (SECA) - certificate available on request	
# Safety factor of *static load test: 1.5 (Test load = Design load x Safety factor)	
# NexTracker installation : Front load 2400 Pa / Back Load 1800 Pa	

Packaging

Stacking Method	Horizontal	Vertical (Optional)
Panels per Pallet	30	31
Loading Capacity (40HQ)	600	806

Note:

- The specifications included in this datasheet are subject to change without notice.
- The electrical data given here is for reference purpose only.
- Manufactured in Australia by Tindo Operations Co Pty Ltd, 6-8 Park Way, Mawson Lakes, SA 5095

Version W415_BL_250724_1

