# **Tindo Karra 350 PERC**





### A Secure & Reliable Investment

Tindo Solar offers a 12 warranty for our 66 cell modules with a 25 year performance guarantee.



### **Great Visual Appearance**

The Tindo Karra series has been designed with appearance in mind. Their deep black cells, with black frames and thinner wires give an aesthetically pleasing appearance.



### **High Efficiency**

Higher module conversion efficiency (up to 19.2%) benefit from Passivated Emmiter Rear Contact (PERC) technology.



### **Proven Field Performance**

Our panels are mounted and performing everyday at the Desert Knowledge Testing Centre in Alice Springs. The Karra series panels are consistently one of the highest performing panels at the centre. www.dkasolarcentre.com.au



### **Maximum Cost Reductions**

Much lower logistics costs due to our modules being made in South Australia with flexible module numbers per pallet on request.



### **Innovative All Weather Technology**

Optimal yields, whatever the weather with excellent low-light and temperature behaviour.



### Low-light Performance

Advanced glass and solar cell surface texturing allow for excellent performance in low-light environment.

Tindo Operations Co Pty Ltd 1300 846 367 www.tindosolar.com 6 Second Avenue Mawson Lakes SA 5095



## Karra Series Data Sheet

#### **Electrical Characteristics**

66 Cells Panel Description		Karra - 350H		
Item	Unit	* STC	*NMOT	
Max. Power (Pmax)	Wp	350	256	
Max. Powervoltage(Vmp)	V	37.55	34.09	
Max. Power current (Imp)	А	9.32	8.02	
Open circuit voltage (Voc)	V	45	41.52	
Short circuit current (Isc)	А	9.94	7.59	
Panel efficiency	%	19.2		
Positive power tolerance	W	0 + ~ 5		

\*STC (Standard Test Condition): 1,000 W/m<sup>2</sup>, AM 1.5, 25°C/ \*NMOT (Nominal Module Operating Temperature): 800W/m<sup>2</sup>, 20°C, wind speed 1m/s, Tolerance of Pmax, Vo &Isc  $\pm$  3% within each watt class at STC.

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	

Safety factor of \*static load test: 1.5 (Test load = Design load x Safety factor)

Mechanical Characteristics		
Cells per panel	66 Cells (6x11)	
Cell Type	5BB PERC Mono-crystalline	
Panel Dimension (Lx Wx Hx)	1827 x 1000 x 40mm	
Panel Weight	20 Kg	
Front Glass	3.2mm Tempered Glass	
Frame	Black Anodized Aluminum	
Juntion Box	With bypass diode / IP67 (1.0M/4mm²)	
Connector Type	KST4-EV02(M), KBT4-EVO2(F) /Stabli-MC4	

System Integration Parameters		
Temperature Range	-40°C to 85°C	
Maximum System Voltage	1,500V DC(IEC)	
Maximum over-current protection	15 A	

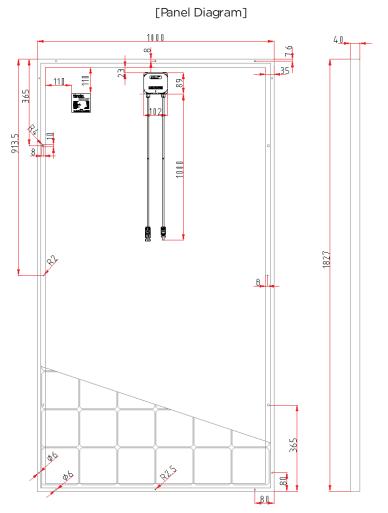
Thermal Characteristics			
Rating		Unit	Value
*NMOT		°C	44
Temperature Coefficient	lsc	%/°C	+0.06
	Voc	%/°C	- 0.30
	Pmax	%/°C	-0.37

NMOT: Nominal Module Operating Temperature

### Safety Ratings & Warranties

Class II
Class C
IEC 61215, IEC 61730
12 years limited product warranty
25 years limited warranty 80% power

Packaging	
Stacking Method	Horizontal / Palletised
Panels per Pallet	25
Pallet Dimensions & Weight	1880x1050x1200, 510kg
Pallets & Panels per 20-ft container	12 Pallets - 282 Panels
Pallets & Panels per 40-ft container high cube	24 Pallets - 600 Panels





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