

**NEW PRODUCT**



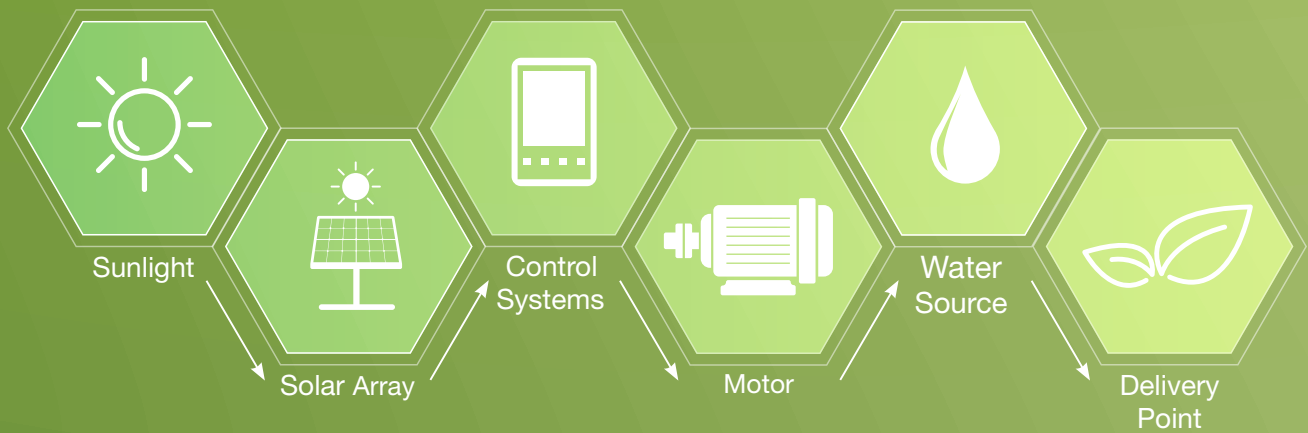
# PDP SERIES

POSITIVE DISPLACEMENT PUMPS

**PRODUCT CATALOGUE 2021**

# SOLAR ENERGY IS A RENEWABLE, VAST AND CLEAN RESOURCE

A typical solar pumping system consists of the following: A solar array to convert sunlight to electricity, a controller to manage the power from the array to the motor which rotates the pump to move the water to where you need it most.



## iSOLAR 4" POSITIVE DISPLACEMENT PUMP SERIES

The 4" Helical Rotor iSOLAR PDP4 range increases the scope and flexibility of the iSOLAR product suite employing the same proven, highly efficient and innovative iSOLAR M220HR motor.

The addition of a Positive Displacement Pump exploits the versatility of the motor's operating range to deliver water even when solar conditions are less than optimum.

The iSOLAR 4" PDP can be installed down a bore, in a tank or fitted to a pontoon to supply from an open body of water.

### WARRANTY



### 4" HELICAL SOLAR PUMP COMPLETE SOLUTION KIT:

#### Kit includes:

- 4" iCON Solar Motor with 3 meters power cable
- 4" iCON Positive Displacement Pump
- Low-level float switch with 30 meters cable
- Nylon Safety Rope - 30 meters
- Built-in NRV

#### You will need:

- V3 controller / Pro controller (plug-n-play)

#### Optional add-ons:

- Plug-n-play DC Isolator
- Solar panels
- Solar array mount (1 - 10 panel kits)
- Bore accessories



\*Images are for illustration purposes only. Actual product may vary.

### MODELS AVAILABLE

Description	Part #	Motor (kW)	Rated Motor Speed (rpm)	Degree of Protection	Max Head (m)	Max Flow (lpm)	Min Fluid Temp (°C)	Max Fluid Temp (°C)	DC Voltage & Current			AC Voltage & Current	
									Vmpp	Voc	Amps (A)	Volts (V)	Amps (A)
BIA PDP4-SOLAR900	808695	2.2	3600	IP68	300	11.5	10	40	60-380	60-440	12	90-280	10
BIA PDP4-SOLAR1200	808696				200	25							
BIA PDP4-SOLAR1500	808697				140	46							



# iSOLAR 3" POSITIVE DISPLACEMENT PUMP SERIES

The 3" Helical Rotor iSOLAR PDP3 range provides a 'plug and play' kitset solution that requires only moderate DIY skills to install.

Ground water supply – supplying water from wells or reservoirs, ideal for farm, small waterworks. Ideal for windmill replacements.

The addition of a Positive Displacement Pump exploits the versatility of the motor's operating range to deliver water even when solar conditions are less than optimum.

The iSOLAR 3" PDP can be installed down a bore, in a tank or fitted to a pontoon to supply from an open body of water.

## WARRANTY



### 3" HELICAL SOLAR PUMP COMPLETE SOLUTION KIT:

#### Kit includes:

- 3" iCON Solar Motor with 30 meters power cable with 4 pin plug
- 3" iCON Positive Displacement Pump
- iCON PDP3 Solar Controller (Plug-n-play)
- Float/Level Switch with 30 meters cable
- Nylon Safety Rope - 30 meters
- Non-return Valve

#### Optional add-ons:

- Plug-n-play DC Isolator
- Solar panels
- Solar post mount kit (1 to 4 panel kits)
- Bore accessories



*\*Images are for illustration purposes only. Actual product may vary.*

### MODELS AVAILABLE

Description	Part #	Motor (kW)	Max Head (m)	Max Flow (lpm)	Controller (V)	Solar Array	Vmp (V)	Max VOC (V)	Max Amps
BIA-PDP3-SOLAR250	808691	0.25	60	25	24	1 x 300W	18-40	48	15
BIA-PDP3-SOLAR370	808692	0.37	80		48	2 x 300W in series	40-76	96	
BIA-PDP3-SOLAR750	808694	0.7	140		96	4 x 300W in series	80-140	180	

## WINDMILL REPLACEMENT MARKET

- Solar Pumps are low maintenance, easy to install, have little to no recurring costs and virtually operate themselves requiring only sunlight to pump water.
- Windmills often require maintenance, repair and replacement of parts which is often expensive and labor intensive. Furthermore, if there is no wind there is no water.
- A solar pump will be in use whenever there is sunlight, even on overcast and cloudy days.



# WEB SELECTOR

The iSOLAR web selector is a simple and quick pump selection process which provides all the information needed for your next solar pump quote.

## How it works

- Visit the website - [isolarselector.whiteint.com.au](http://isolarselector.whiteint.com.au)  
[isolarselector.whiteint.co.nz](http://isolarselector.whiteint.co.nz)
- Enter your location & water requirements
- The iSOLAR web selector will determine the average available monthly solar hours, pump needed, number of solar panels required and more
- Simply download and email a copy of the results



<b>INPUT DATA</b> LOCATION/POST-CODE: XYZ TOTAL DYNAMIC HEAD: 100m FLOW-RATE: 2,000L/Day; 7L/min; 0.11L/sec SEASON: Average DAYLIGHT HOURS: 4.85 hrs/day	<b>SOLAR IRRADIATION DATA</b> Solar irradiation for XYZ. Average 4.85 hours per day 
<b>PUMP DETAILS</b> Description: DAB-S4A36SOL Item code: 805150 Max Head: 120m Max Flow: 23L/min Downloads SELECTION GUIDE OPERATION & INSTALLATION MANUAL DATA SHEET	<b>DAILY OUTPUT GRAPH</b> Daily output values for XYZ 
<b>SOLAR ARRAY DETAILS</b> Description: BIA-ER02PM Item code: 805923 No of Panels: 2 Mount: Pole Downloads DATA SHEET BROCHURE INSTALLATION MANUAL	<b>PRODUCTS REQUIRED FOR THE iSOLAR SYSTEM</b> ✓ 805150 - DAB-S4A36SOL (includes motor and pump) ✓ 805923 - BIA-ER02PM (includes 2x MC4 - 3m, 2x MC4 - 10m, 1x 1000V 25A DC Isolator, Post mount, 2 x 330W panels) ✓ Solar controller & Flow meter
<b>PERFORMANCE CURVE</b> <p>Note: This selection process assumes ideal weather conditions, actual performance may vary.</p>	<b>CHECKLIST</b> <b>A. Over-sizing Solar panels:</b> Max power of the solar arrays must not exceed 440Voc & 12Amps - DC Power <b>B. Sizing up a generator:</b> Take total kW of the solar array, multiply by 1.1 and then divide by 0.8 to arrive at the minimum kVA required from the generator <b>C. Shaft tensions:</b> When manipulating the shaft without power the shaft may appear to be tight. BIA-M240SOL motors have a tighter shaft due to the magnetic force required to support up to 320m head.

Available from your local iSOLAR distributor:

**WHITE INTERNATIONAL PTY LTD**  
 60 Ashford Ave Milperra NSW 2214  
 PO Box 304 Milperra NSW 2214  
 Phone 02 9783 6000 Fax 02 9783 6001  
 Customer Service 1300 783 601  
 Email Sales: [pumpsales@whiteint.com.au](mailto:pumpsales@whiteint.com.au)  
[www.whiteint.com.au](http://www.whiteint.com.au)

**WHITE INTERNATIONAL NZ LTD**  
 15G Kerwyn Avenue  
 East Tamaki, Auckland 2013, New Zealand  
 Phone 09 579 9777 Fax 09 579 7775  
 Customer Service 0800 509 506  
 Customer Service Fax 0800 804 344  
 Email Sales: [sales@whiteint.co.nz](mailto:sales@whiteint.co.nz)  
[www.whiteint.co.nz](http://www.whiteint.co.nz)



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