

# PDP SERIES

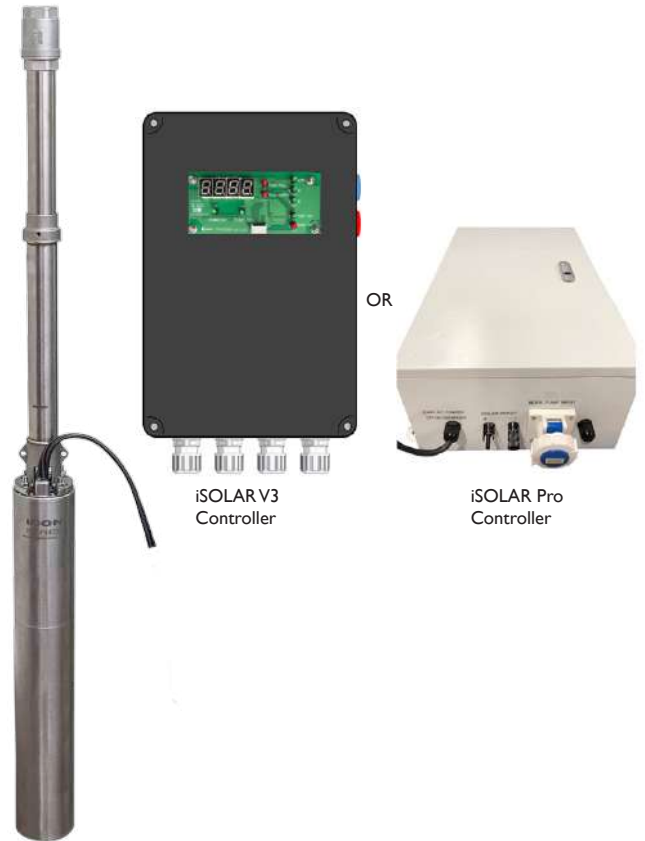
## 4" HELICAL SOLAR PUMP

The 4" Helical Rotor iSOLAR PDP4 increases the scope and flexibility of the iSOLAR product suite. The highly efficient and innovative iSOLAR M220HR motor, and the positive displacement wet end exploits the versatility of the motor's operating range to deliver water even when solar conditions are less than optimum.

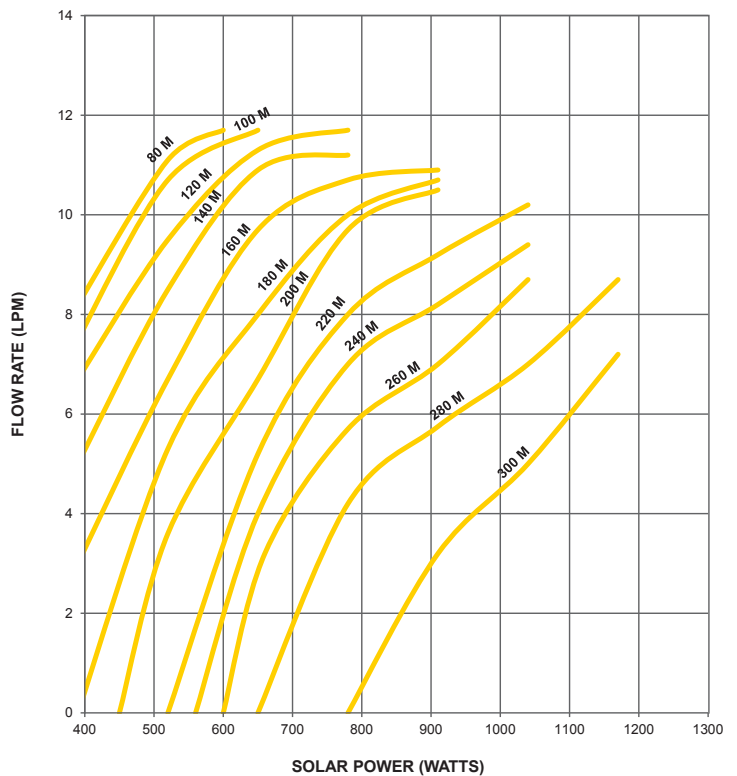
The iSOLAR 4" PDP can be installed down a bore, in a tank or fitted to a pontoon to supply from an open body of water.

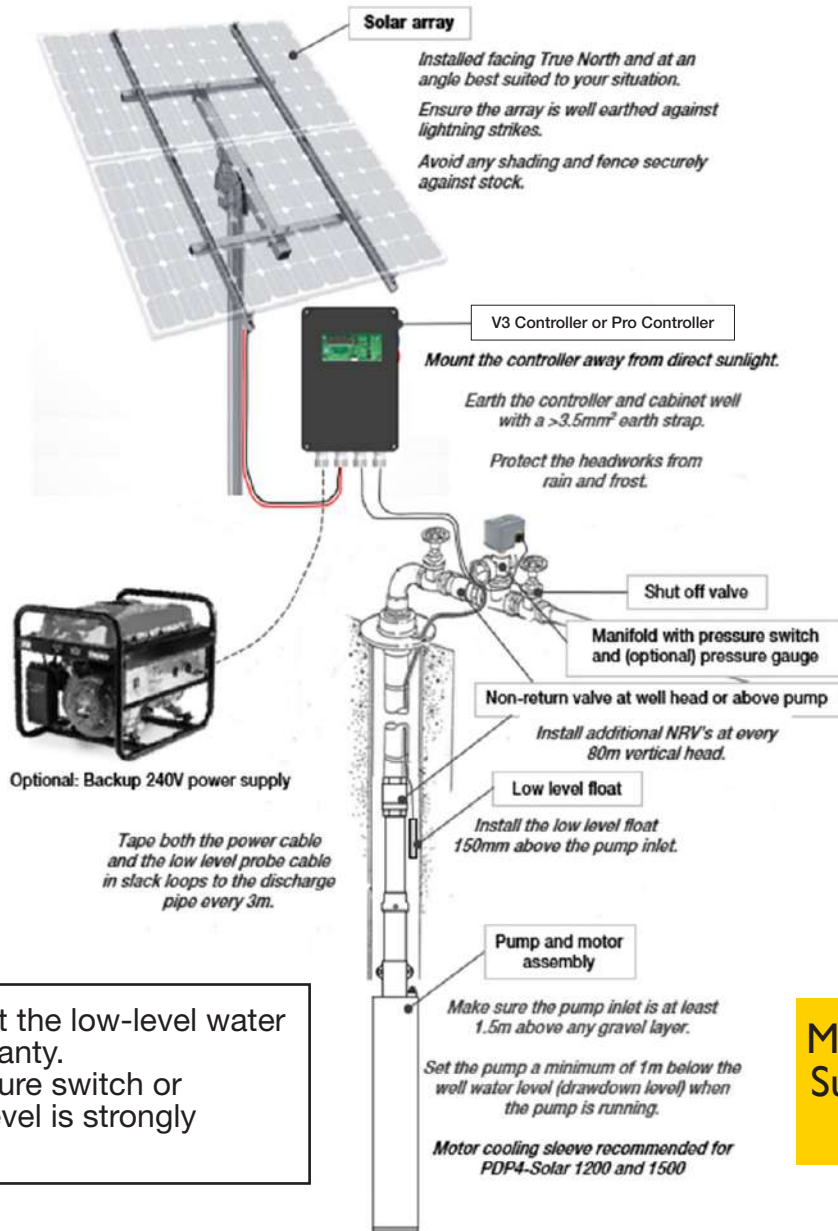
MODEL	BIA-PDP4 SOLAR900
Motor (kW)	2.2
Rated Motor Speed (rpm)	3600
Degree of Protection	IP68
Max Head (m)	300
Max Flow (lpm)	11.5
Min Fluid Temp (°C)	10
Min Fluid Temp (°C)	40
DC Voltage and Current	
Vmpp (V)	60-380
Voc (V)	60-440
Amps (A)	12
AC Voltage and Current	
Volts (V)	90-280
Amps (A)	10

Solar array recommendation indicative only  
Solar inputs must respect the VOC and Max Current (Amperage) values



BIA-PDP4 SOLAR900





Installation without the low-level water float will void warranty.  
Fitment of a pressure switch or destination float level is strongly recommended

**Maximum Pump Submergence is 150m**

To minimise energy losses the following chart provides recommended cable sizes.  
If calculating your own cable size, maximum voltage drop allowable is 3%.

SOLAR PANEL INPUT (In Series)				CABLE LENGTH (UP to 'X' Meters)									
DC Input		Vmpp Volts	Impp Amps	10	25	50	75	100	125	150	200	250	300
Watts	Panels			CROSS SECTION MM <sup>2</sup>									
640	2x320	66.8	10	2.5	6	10	25	25	35	35	50	70	70
960	3x320	100.2	10	1.5	4	10	16	16	25	25	35	50	50
1280	4x320	133.6	10	1.5	4	6	10	16	16	25	25	35	35
1600	5x320	167.0	10	1.5	2.5	6	10	10	16	16	25	25	25
1920	6x320	200.4	10	1.5	2.5	4	6	10	10	16	16	25	25
2240	7x320	233.8	10	1.5	2.5	4	6	10	10	10	16	16	25
2880	8x320	267.2	10	1.5	1.5	4	6	6	10	10	16	16	25
3200	9x320	300.6	10	1.5	1.5	2.5	4	6	10	10	10	16	16
3520	10x320	334.0	10	1.5	1.5	2.5	4	6	6	10	10	16	16
3840	11x320	367.4	10	1.5	1.5	2.5	4	6	6	10	10	16	16

This chart is to be used as a guide only. It is based on a 320W solar panel, 33.4Vmpp, 10 A Impp