

Datasheets



Residential On-Grid Photovoltaic System Kits 1kW / 2kW / 3kW / 5kW / 10kW / 20kW



Product Description

Poseidon water pumping PV system kits are solar powered units that enable users to irrigate water in remote locations with minimal to no grid access. Poseidon Solar Water Pump kits are reliable, stand-alone systems that require no fuel, batteries and require minimal maintenance.



Ready for any scale

Poseidon solar water pump systems are highly versatile and dynamic in their application, from small scale agricultural use to large scale municipality water projects.



Weather resistant

Designed for easy installation, yet engineered particularly robust to withstand inclement outdoor weather conditions.



Adaptable to your needs

With multiple submersible pump sizes offered, users have flexibility in choosing well water head, depths and required daily water flows.



What's in the Box

- Solar modules
- Solar pumping inverter
- Float switch
- Custon ground mounting system
- PV wiring and grounding harnesses
- DC disconnects
- Wire management kit
- Grounding hardware
- Safety lebel kit
- Single and three-line electrical and mechanical schematics



Solar Irrigation Made SImple

Poseidon solar pump kits are designed to extract water for diversified range of agricultural applications including livestock and crop irrigation. These systems require no batteries and are often used in remote areas where the cost of running traditional AC powered water pumping is cost prohibitive. These systems are typically ground mounted and are offered in a variety of different volume and head sizes adjusting to most well requirements.

Product Benefits

- Provide clean water distribution with only solar energy
- No moving parts with minimal maintenance
- Can be installed in any location including remote off-grid environments

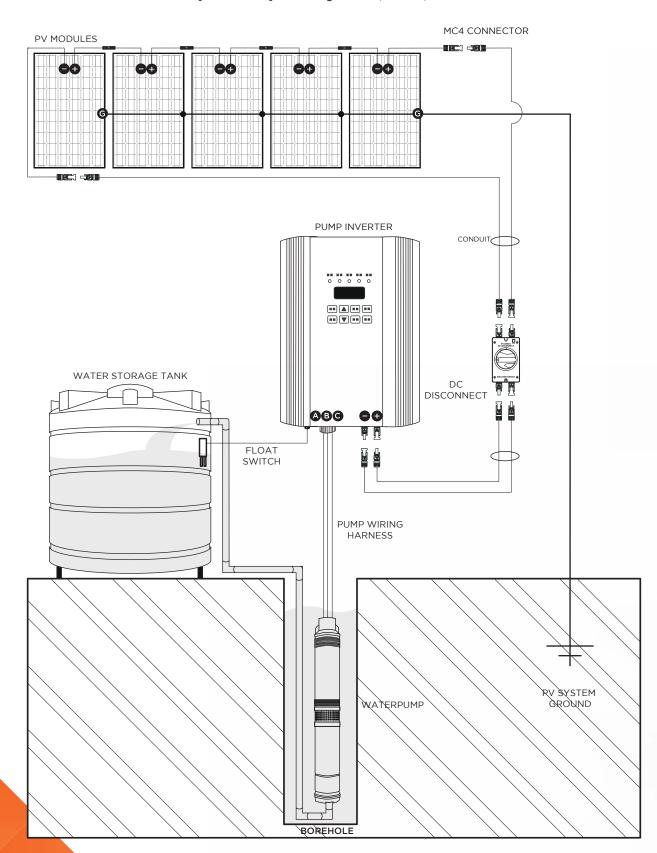
Common Applications

- Livestock
- Agricultural irrigation (row crop, center pivot, large scale drip)
- Wildlife irrigation systems
- Homes, farms, ranches and cabins
- Viages, businesses, and communities

POSEIDON Solar Water Pump Kits

Product Name	Poseidon - 1	Poseidon - 2	Poseidon - 3	Poseidon - 5	Poseidon - 10	Poseidon - 20	
Product Series System Size Nominal (kWp)	0.705	212	Posei		10.0	21.2	
art #	0.795 POS-1-DC	2.12 POS-2-DC	2.65 POS-3-DC	5.3 POS-5-AC	10.6 POS-10-AC	21.2 POS-20-AC	
art #	POS-I-DC	PO5-2-DC	PO5-3-DC	PO5-5-AC	PO5-10-AC	PO5-20-AC	
V MODULE SPECIFICATIONS (*Poly)							
ower (W)			265				
'mp (V)			31.				
/oc (V)			38.				
sc (A)			9.1				
mp (A)	8.55						
Dimensions (L x W x H) (mm)		1638 x 982 x 35					
V module weight (kg)		19.5 TUV (IE61215 & IEC61730) / VDE (IEC61215 & IEC61730) / UL / CE — TUV (IEC61215 & IEC61730) / CE					
ertification Standards		TUV (IE61215 & IEC61	730) / VDE (IEC61215 & IEC617	'30) / UL / CE — TUV (IEC6	1215 & IEC61730) / CE		
NVERTER SPECIFICATIONS							
nverter Type		DC			AC		
nverter Size (kW)	0.6	1.2	1.8	5.5	7.5	15	
lax DC Power (kW)	1	2.2	3		11	22	
ax DC Voltage (V)	150	20	00		85	50	
PPT Voltage range (V)	60 - 120	120	- 160		500	- 700	
o. of MPPT'S		1				1	
ax Output Current (A)	13	11	16	13	18	30	
C Nom. Voltage (V)		N/A	-	<u> </u>		30	
C Frequency range (Hz)		N/A				0	
umber of Phases		N/A				3	
imensions (L x W x H) (mm)	202 x 244 x 146	202 x 284 x 146	202 × 284 × 146		425 × 4		
verter Weight (kg)	3.6		.3	9.5	14.5	15	
ertification Standards	3.0		6-3:2007, EN 61000-6-1:2007, I			15	
'arranty (years)		02 21101000 0	3		0, 211 00170.1007		
arranty (years)							
WATER PUMP SPECS							
ump Power (kW)	0.6	1.1	1.5	3	5.5	13	
Daily Water Flow (m3)	2 to 18	18 to 33	34 to 76	10 to 20	80 to 160	700 to 1100	
Water Head Range (m)	80 to 18	43 to 22	34 to 16	145 to 90	79 to 43	22 to 18	
ımp Outlet - Hose Diameter (mm)	25	40	50	30	65	150	
/ell Diameter (mm)		125		125	200 - 250	200 - 250	
C Input Voltage (VAC)		N/A			380		
C Frequency (Hz)		N/A			50		
imensions (L x W) (mm)	560 x 100	830 x 100	889 x 100	1563 x 100	1652 x 133	1652 x 133	
ump Material			Screw and Bo	dy AISI 304			
		CE - EN 61000-6-3:2007+A	\1:2011, EN 61000-6-1:2007, EN	60335-1:2012, EN 60335-2-	41:2003, +A1:2004+A2:2010		
ertification Standards			1				
ertification Standards Varranty (years)							
	mp flow and head variations avai	lable upon request					
Varranty (years) Flow based on 6kWh/m2/day **Other Pui	mp flow and head variations avai	ilable upon request					
larranty (years) Flow based on 6kWh/m2/day **Other Pul OS CONFIGURATION	mp flow and head variations avai	ilable upon request	2	1	2	4	
/arranty (years) Flow based on 6kWh/m2/day **Other Pur OS CONFIGURATION C Disconnect	1				2		
Tarranty (years) Flow based on 6kWh/m2/day **Other Pur OS CONFIGURATION C Disconnect W Wire - 4mm 1000V (m)	1 50	50	100	100	100	200	
Varranty (years) Flow based on 6kW/h/m2/day **Other Pur OS CONFIGURATION C Disconnect PV Wire - 4mm 1000V (m) Pump Power Cable (m)	1						
Varranty (years) Flow based on 6kWh/m2/day **Other Pur OS CONFIGURATION C Disconnect PV Wire - 4mm 1000V (m) Pump Power Cable (m) Ground Wire - 4mm x (m)	1 50	50 75	100	100 100	100 100	200 150	
Varranty (years) Flow based on 6kWh/m2/day **Other Pul OS CONFIGURATION C Disconnect PV Wire - 4mm 1000V (m) Pump Power Cable (m) Sround Wire - 4mm x (m) Extra wire is available upon request	1 50	50 75	100	100 100	100 100	200 150	
Arranty (years) Flow based on 6kWh/m2/day **Other Pur OS CONFIGURATION C Disconnect VY Wire - 4mm 1000V (m) Fround Wire - 4mm x (m) Extra wire is available upon request VYSTEM LAYOUT	1 50 50	50 75 50	100	100 100 50	100 100 100	200 150 100	
Arranty (years) Flow based on 6kWh/m2/day **Other Pur OS CONFIGURATION C Disconnect Purple - 4mm 1000V (m) From Power Cable (m) Fround Wire - 4mm x (m) Extra wire is available upon request YSTEM LAYOUT of Modules	1 50	50 75 50	100	100 100	100 100 100	200 150 100	
Arranty (years) Flow based on 6kWh/m2/day **Other Pui DS CONFIGURATION C Disconnect PV Wire - 4mm 1000V (m) Forund Wire - 4mm x (m) Fixtra wire is available upon request VSTEM LAYOUT of Modules of Inverters	1 50 50	50 75 50	100	100 100 50	100 100 100	200 150 100	
arranty (years) Flow based on 6kWh/m2/day **Other Pur DS CONFIGURATION C Disconnect V, Wire - 4mm 1000V (m) Fump Power Cable (m) Fround Wire - 4mm x (m) Fixtra wire is available upon request VSTEM LAYOUT of Modules of Inverters V Layout options	1 50 50	50 75 50 8 1	100 100 10 10 Portrait or L	100 100 50 20 andscape	100 100 100 40	200 150 100 80	
Varranty (years) Varran	1 50 50 50	50 75 50 8 1	100 100 10 10 Portrait or L	100 100 50 20 andscape	100 100 100 100 40 1	200 150 100 80 1	
Varranty (years) Varranty (years) Varranty (years) Varranty (years) Varray Varr	1 50 50 50 3 3 5.1 58.5	50 75 50 8 1 13.6 156	100 100 10 10 Portrait or L 17 195	100 100 50 20 andscape	100 100 100 100 40 1 68 780	200 150 100 80	
arranty (years) Flow based on 6kWh/m2/day **Other Pul DS CONFIGURATION C Disconnect V Wire - 4mm 1000V (m) Flow based on 6kWh/m2/day **Other Pul DS CONFIGURATION C Disconnect V Wire - 4mm 1000V (m) Flow bring Power Cable (m) Flow wire - 4mm x	3 50 50 50 3 5.1 58.5 3	50 75 50 8 1 13.6 156 4	100 100 100 10 Portrait or L 17 195 5	100 100 50 20 andscape	100 100 100 100 40 1 68 780 20	200 150 100 80 1	
Carranty (years) Flow based on 6kWh/m2/day **Other Pul DS CONFIGURATION C Disconnect V Wire - 4mm 1000V (m) From Power Cable (m) From One Cable (m) From One Cable (m) From One Cable (m) For White - 4mm x (m) For White -	1 50 50 50 3 3 5.1 58.5 3 114.6	50 75 50 8 1 13.6 156 4	100 100 100 100 Portrait or L 17 195 5	100 100 50 20 andscape	100 100 100 40 1 1 68 780 20 764	200 150 100 80 1	
arranty (years) Flow based on 6kWh/m2/day **Other Pul DS CONFIGURATION C Disconnect V Wire - 4mm 1000V (m) Fump Power Cable (m) Fround Wire - 4mm x (m) Fire I available upon request V STEM LAYOUT Of Modules Of Inverters V Array Veright (kg) PV Module String Configuration Mono - Polyo String Vmp String Vmp	3 50 50 50 3 5.1 58.5 3	50 75 50 8 1 13.6 156 4 152.8 124.4	100 100 100 10 Portrait or L 17 195 5	100 100 50 20 andscape	100 100 100 40 1 1 68 780 20 764 622	200 150 100 80 1	
arranty (years) low based on 6kWh/m2/day **Other Pul DS CONFIGURATION C Disconnect V Wire - 4mm 1000V (m) ump Power Cable (m) iround Wire - 4mm x (m) ixxtra wire is available upon request (STEM LAYOUT of Modules of Inverters / Array Surface Area (m2) / Array Weight (kg) PV Module String Configuration No. of PV Modules / String String Voc String V	1 50 50 50 3 3 5.1 58.5 3 114.6	50 75 50 8 1 13.6 156 4	100 100 100 100 Portrait or L 17 195 5	100 100 50 20 andscape	100 100 100 40 1 1 68 780 20 764	200 150 100 80 1	
Arranty (years) Flow based on 6kWh/m2/day **Other Pul DS CONFIGURATION C Disconnect V Wire - 4mm 1000V (m) Furump Power Cable (m) For a wire is available upon request FORTH LAYOUT Of Modules Of Inverters V Array Surface Area (m2) V Array Weight (kg) PV Module String Configuration Mono — Poly) String Vmp String Imp	1 50 50 50 3 3 5.1 58.5 3 114.6	50 75 50 8 1 13.6 156 4 152.8 124.4	100 100 100 100 Portrait or L 17 195 5	100 100 50 20 andscape	100 100 100 40 1 1 68 780 20 764 622	200 150 100 80 1	
Arranty (years) Flow based on 6kWh/m2/day **Other Pul OS CONFIGURATION C Disconnect Pul	1 50 50 50 3 3 5.1 58.5 3 114.6	50 75 50 8 1 13.6 156 4 152.8 124.4	100 100 100 100 Portrait or L 17 195 5	100 100 50 20 andscape 34 390	100 100 100 40 1 1 68 780 20 764 622	200 150 100 80 1	
Arranty (years) Flow based on 6kWh/m2/day **Other Put OS CONFIGURATION C Disconnect DY Wire - 4mm 1000V (m) Forum Power Cable (m) Forum Wire - 4mm x (m) Forum W	1 50 50 50 3 3 5.1 58.5 3 114.6	50 75 50 8 1 13.6 156 4 152.8 124.4	100 100 100 100 Portrait or L 17 195 5 191 155.5	100 100 50 20 andscape 34 390	100 100 100 40 1 1 68 780 20 764 622	200 150 100 80 1	
Varranty (years) Varran	1 50 50 50 3 3 5.1 58.5 3 114.6	50 75 50 8 1 13.6 156 4 152.8 124.4 8.55	100 100 100 100 Portrait or L 17 195 5 191 155.5	100 100 50 20 andscape 34 390	100 100 100 100 40 1 68 780 20 764 622 8.55	200 150 100 80 1	
Varranty (years) Flow based on 6kWh/m2/day **Other Pul OS CONFIGURATION C Disconnect PV Wire - 4mm 1000V (m) Pump Power Cable (m) Ground Wire - 4mm x (m) Extra wire is available upon request YSTEM LAYOUT of Modules of Inverters V Layout options V Array Surface Area (m2) V Array Weight (kg) PV Module String Configuration (Mono - Poly) VIFIEM OPTIONS VI-FIEM OPTIONS V System Color V Mounting System Type	1 50 50 50 3 3 5.1 58.5 3 114.6	50 75 50 8 1 13.6 156 4 152.8 124.4 8.55	100 100 100 100 Portrait or L 17 195 5 191 155,5	100 100 50 20 andscape 34 390 GPRS ck Module le, Flat Concrete, Ballast, Gr	100 100 100 100 40 1 68 780 20 764 622 8.55	200 150 100 80 1 136 1560	
Varranty (years) Flow based on 6kWh/m2/day **Other Put OS CONFIGURATION C Disconnect Put OS Y Wire - 4mm 1000V (m) Pump Power Cable (m) Ground Wire - 4mm x (m) Extra wire is available upon request YSTEM LAYOUT of Modules of Inverters V Layout options V Array Surface Area (m2) V Array Weight (kg) PV Module Sorting Configuration (Mono – Poly) String Voc String Configuration (Mono – Poly) String Imp YSTEM OPTIONS VI-Fi Monitor V System Color V Mounting System Type cccessorries	1 50 50 50 3 3 5.1 58.5 3 114.6	50 75 50 8 1 13.6 156 4 152.8 124.4 8.55	100 100 100 100 Portrait or L 17 195 5 191 155,5	100 100 50 20 andscape 34 390 GPRS ck Module le, Flat Concrete, Ballast, Gr	100 100 100 100 40 1 1 68 780 20 764 622 8.55	200 150 100 80 1 136 1560	
Arranty (years) Flow based on 6kWh/m2/day **Other Pul OS CONFIGURATION C Disconnect PV Wire - 4mm 1000V (m) Fump Power Cable (m) Fround Wire - 4mm x (m) Extra wire is available upon request YSTEM LAYOUT Of Modules of Inverters V Layout options V Array Weight (kg) PV Module String Configuration Mono - Poly) String Imp YSTEM OPTIONS V System Color V Mounting System Type ccessorries HIPPING	1 50 50 50 3 3 5.1 58.5 3 114.6 93.3	50 75 50 8 1 13.6 156 4 152.8 124.4 8.55	100 100 100 100 100 Portrait or L 17 195 5 191 155.5 Wi-Fi or Silver or Bla	100 100 50 20 andscape 34 390 GPRS ck Module le, Flat Concrete, Ballast, Gr	100 100 100 100 40 1 1 68 780 20 764 622 8.55	200 150 100 80 1 136 1560	
Varranty (years) Flow based on 6kWh/m2/day **Other Put OS CONFIGURATION C Disconnect PV Wire - 4mm 1000V (m) Pump Power Cable (m) Ground Wire - 4mm x (m) Extra wire is available upon request YSTEM LAYOUT of Modules of Inverters V Layout options V Array Surface Area (m2) V Array Weight (kg) PV Module String Configuration (Mono – Poly) String Vmp String Imp YSTEM OPTIONS VI-FI Monitor V System Color V Mounting System Type cccessorries HIPPING V Kit Weight (kg)	1 50 50 50 3 3 5.1 58.5 3 114.6 93.3	50 75 50 75 50 8 1 13.6 156 4 152.8 124.4 8.55	100 100 100 100 100 100 100 100 Portrait or L 17 195 5 191 155.5 Wi-Fi or Silver or Bla	100 100 50 20 andscape 34 390 GPRS ck Module le, Flat Concrete, Ballast, Gr	100 100 100 100 100 100 100 100 100 100	200 150 100 80 1 136 1560	
Varranty (years) Flow based on 6kWh/m2/day **Other Pur OS CONFIGURATION CC Disconnect PV Wire - 4mm 1000V (m) Pump Power Cable (m) Ground Wire - 4mm x (m) Extra wire is available upon request YSTEM LAYOUT 10f Modules of Inverters V Layout options V Array Surface Area (m2) V Array Weight (kg) PV Module String PV Module String Configuration (Mono - Poly) String Voc String Vmp	1 50 50 50 3 3 5.1 58.5 3 114.6 93.3	50 75 50 8 1 13.6 156 4 152.8 124.4 8.55	100 100 100 100 100 Portrait or L 17 195 5 191 155.5 Wi-Fi or Silver or Bla	100 100 50 20 andscape 34 390 GPRS ck Module le, Flat Concrete, Ballast, Gr	100 100 100 100 40 1 1 68 780 20 764 622 8.55	200 150 100 80 1 136 1560	

POSEIDON Water Pump Example Layout (1kW)





The all-in-one Box Solution

The difference is clear, get better results with our all in a box packaging solutions. Symtech Solar's heavy duty ISPM15 compliant care design not only protects the contents during international shipping but also ensures that the solar kits arrive to their destination site undamaged and ready for installation. Symtech Solar's BOS toolboxes are included in all our solar kits and designed with the installer in mind. With years of installation experience, we understand the benefits of having a safe and well organized jobsite.



Packaging Specs

Designed to be warehouse friendly for distribution centers and local logistics companies, our kits are easily stacked, inventoried, and consolidated.

Poseidon 1kW

1.7 x 0.45 x 1 1 kit per pallet

#POS-1

38 kits per 20' 76 kits per 40'



Poseidon 3kW

1.7 x 0.70 x 1 1 kit per pallet

#POS-3

20 kits per 20' 40 kits per 40'



Poseidon 10kW

1.7 x 1.1 x 1 2 pallets per kit

#POS-10

6 kits per 20' 12 kits per 40'



Poseidon 2kW

1.7 x 0.55 x 1 1 kit per pallet

#POS-2

26 kits per 20' 52 kits per 40'



Poseidon 5kW

1.7 x 1.1 x 1 1 kit per pallet

#POS-5

12 kits per 20' 24 kits per 40'



Poseidon 20kW

1.7 x 1.1 x 1 2 pallets per kit

#POS-20

6 kits per 20' 12 kits per 40'





HELPING YOU HARVEST CLEAN ENERGY

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