

jntech



Solar Pumping System

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HEFEI JNTECH NEW ENERGY CO.,LTD.

Future / Green / Sustainable



Online service Time 24 hours 7days



Jntech Worldwide Customers

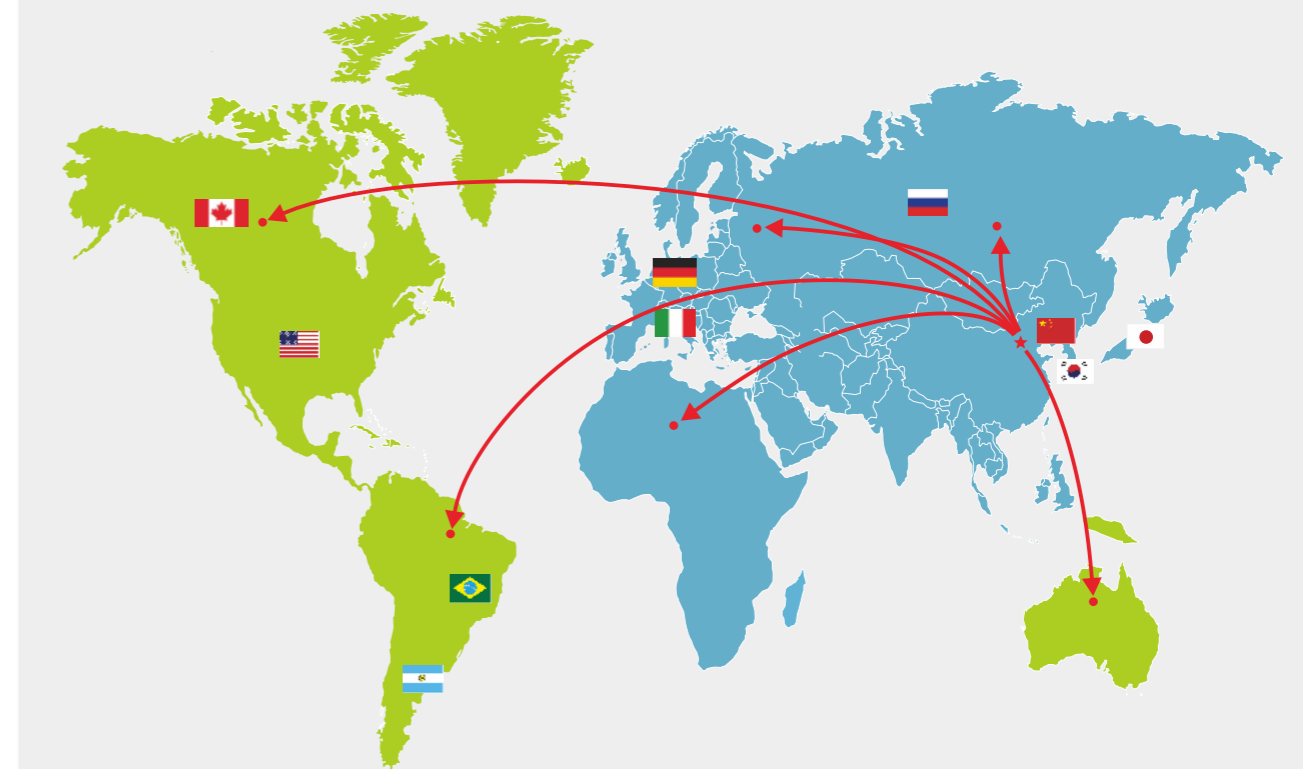


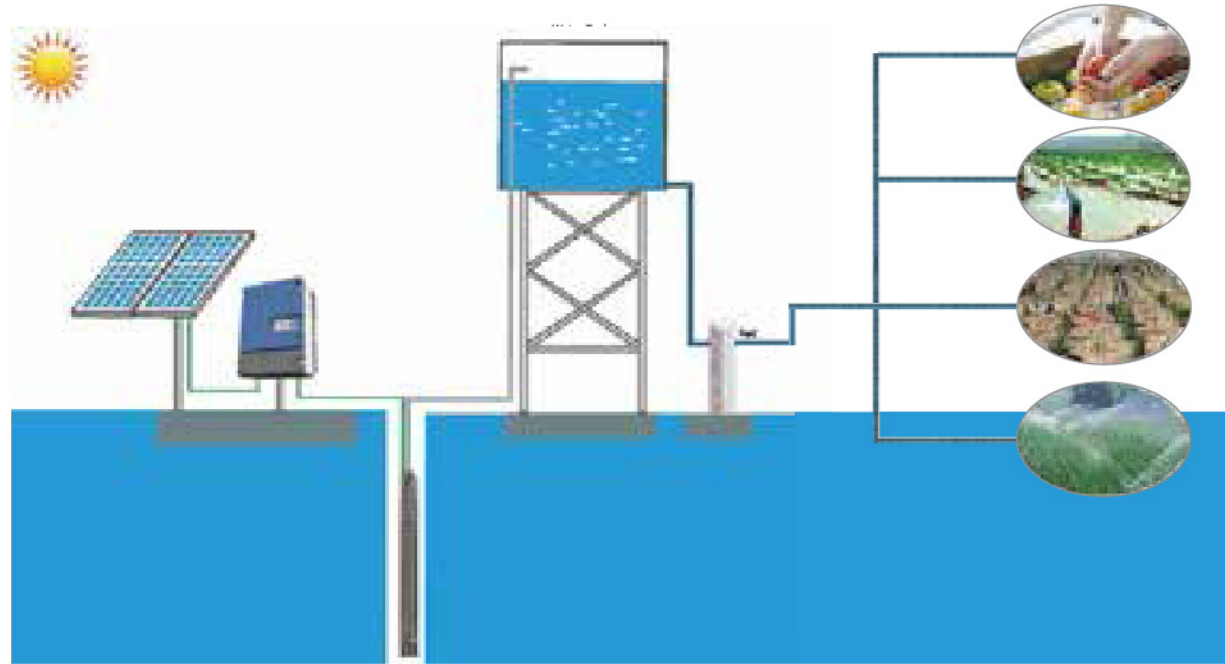
INTRODUCTION

Hefei Jntech New Energy Co.,Ltd.

HEFEI JNTECH NEW ENERGY was set up in 2006, whose main business is around the solar power application, covers service and products. The service is mainly about power station investment and EPC total package. The products rely on the human resources and technological superiority of Hefei Institute of Physical Science, Chinese Academy of Sciences and Hefei University of Technology, devoting itself to the research and development, business development and project implementation. Include PV pumping system, PV energy storage system, and water floating photovoltaic system technology.

Adhering to the idea of "Create green energy future, Ensure the sustainable social development", JNTECH takes scientific development view as guideline and views creating green eco-friendly new energy as duty, keeps serving society, serving people and serving the national strategic goal of sustainable development.



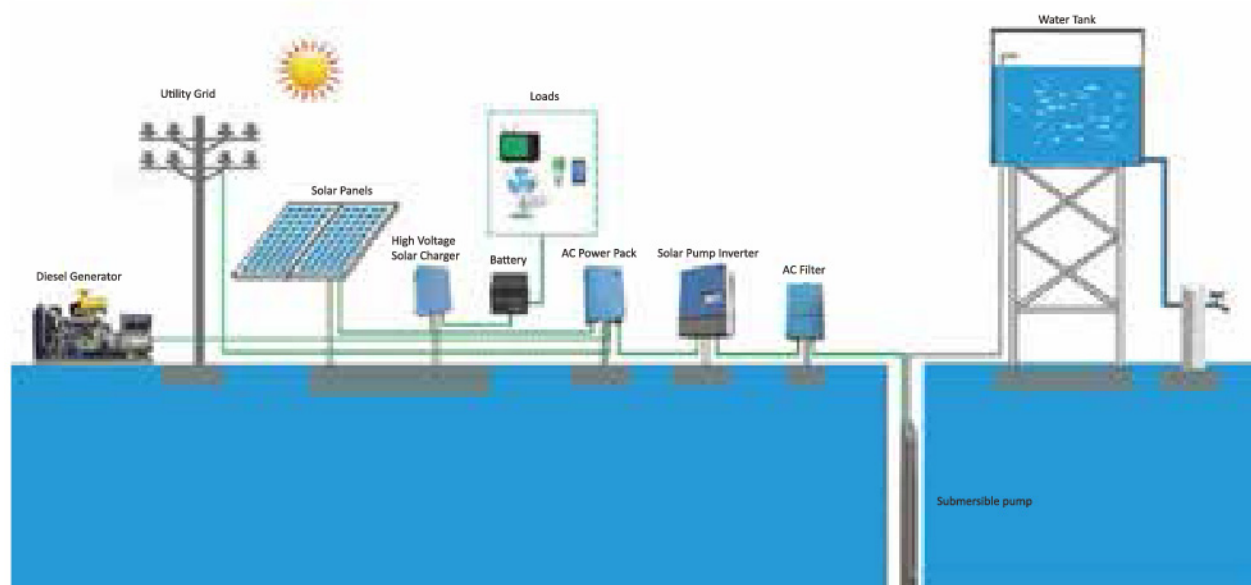


◆ System Introduction (AC system)

Solar pumping system consists of four parts: solar panels, solar pumping inverter, three-phase AC pump and water storage device. The solar pumping inverter converts DC power produced by solar panels to AC power which drives AC pump to pump water from borehole, river, lake etc. to the storage device. The inverter applies high efficiency MPPT algorithm to maximize power harvested from solar panels. It will make the system to maximize efficiency to get the water as much as possible. The solar pumping system fulfills concept of low carbon, energy conservation, environmental protection to improve the living standard in water-deficient area.

◆ More function of solar pump system

Accessories will be added in solar pump system to realize more function. AC input function, high voltage solar charger to charge battery to save energy, AC filter to protect pump.



◆ System Application

Solar pumping systems can be applied in the area with sunshine and areas lack of electricity, such as:

- Daily water using
- Agricultural irrigation (drop irrigation, sprinkling irrigation, flood irrigation)
- Forestry irrigation
- Desert control
- Pasture animal husbandry
- Rural town and village water supply
- Desalinization of sea water
- Scenic fountain etc.



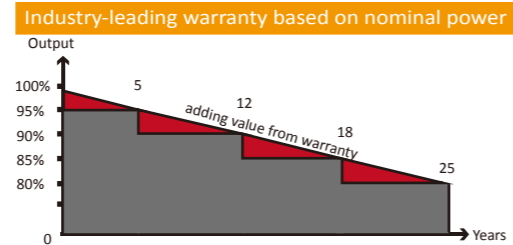
◆ System Features

- Reliable solution for agricultural irrigation, daily water, desert control in non-electricity and water deficient area.
- Wide application with all kinds of PV modules and 3-phase AC pumps
- IP 65 for outdoors application
- Max. operation temperature 60 °C
- GPRS remote monitoring for real time operation status and control on/off
- Excellent performance during cloudy weather with 5% more water output compared to competitors
- ROI is only less than 2 years compared to diesel generator
- Full automatic unattended operation with perfect protection functions for long lifespan 25 years
- 3 years warranty for complete system, 10 years for PV modules

Main Devices of Solar Pumping System

◆ Solar Panels

- Based on nominal power (pnom)
- 25-year transferrable power output
- 5 years warranty of 95% power output
- 12 years warranty of 90% power output
- 18 years warranty of 85% power output
- 25 years warranty of 80% power output
- 10 years material and workmanship warranty



◆ Solar Mobile Mounting Structure

- Engineered for long product life and highly prefabricated to reduce installation costs;
- very affordable option for mid-to-large PV installations;
- Easy installation and application in different location;
- Material as customers request.



◆ Solar pumping inverter

- AC three phase solar pump inverter;
- Output voltage 220V~240V ac /380~460V ac;
- Power of low voltage ranges from 1.1kw to 4kw;
- Power of high voltage ranges from 2.2kw to 132kw.



◆ AC Pump

Any three phase AC pumps can be used. In order to keep high efficiency of whole system, please use all matching pumps from Jntech New Energy. We take three phase AC submersible pumps as example, for solar pumping system configuration.

Operation Conditions

- Solid grain or fiber-free dilute clean non-corrosive liquids
- Max. liquid temperature is +25 °C
- pH: 6.5~8.5

Pump Motor

- Three phase 50/60Hz 220~240V/380~460V
- Domestic or international brand
- Warranty can extend max. 3 years



Three Phase, 50/60Hz, 220V~240V or 380V~460V AC Pump

Accessories of Solar Pumping System

◆ PV Combiner Box

Jntech PV combiner box shall be used for solar pumping system from 22kW to 132kW, in order to reduce connecting cables for easy maintenance and low cost and to keep safety and reliability. The combiner box has current counter-attack, over current, over voltage function and lightning protection as well. Customized design possible.

Main parameters

- Max. input DC voltage: 1000Vdc
- Max. input current: 10A
- Protection class: IP65
- Operating temperature: -25~+55 °C
- 8/12/16/24 input available



◆ Water Level Sensor

Mechanically activated device for dry run protection in applications with Solar pump systems. The switch can be used to detect the water level within a well. When water level in well dropped below the level of the well probe, the solar pump inverter will stop pump to protect. It is also used for overflow protection, once water in tank reaches the highest level which water level sensor set, the solar pump inverter will stop to save energy and water.

Features

- Reliable dry run protection
- Reliable overflow protection
- Simple to install



◆ Outlet Filter

The outlet filter connected between solar pump inverter and pump. It is used once the cable between inverter and pump is too long.

Function:

- Effective control of motor reflected voltage, protect motor insulation, prolong the lifespan of pump;
- Effective suppress the surge voltage on electric cable, protect inverter power module;
- Filter out PWM control high frequency harmonic, pump running more stable, improve system efficiency.



◆ AC Power Pack

AC power pack will realize AC input of solar pump inverter to make system working 24 hours.

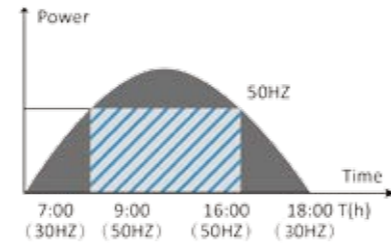
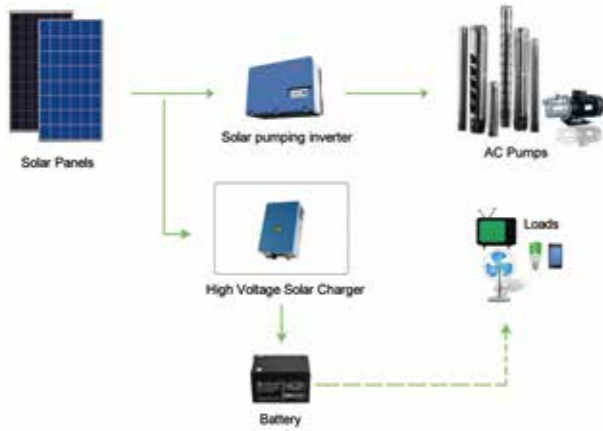
Features:

- Support water pumping system working 24 hours per day;
- PV, Grid, Generator power supply, pump can continue to work when sun radiation is insufficient; even in rainy days, or night, It can be switched to Grid or diesel generator input with soft-start function.
- IP65 Protection, fanless design;
- Built-in DC circuit breaker, wall-mounting installation, easy operation.

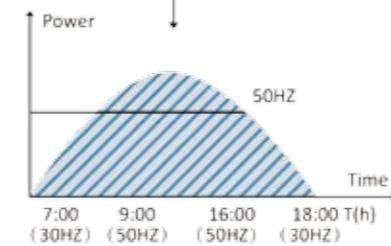


◆ High Voltage Solar Charger

Solar pumping system can be used as independent off-grid generating system
 Full system energy application with solar pumping system and solar charger
 wide high-voltage input range, higher reliability with isolated design
 Battery of 12Vdc with 15A or 25A
 Excellent charging battery management with over-voltage and current protection function.
 Integrated switch, wall-mounted installation and easy operation



The grey part energy is wasted



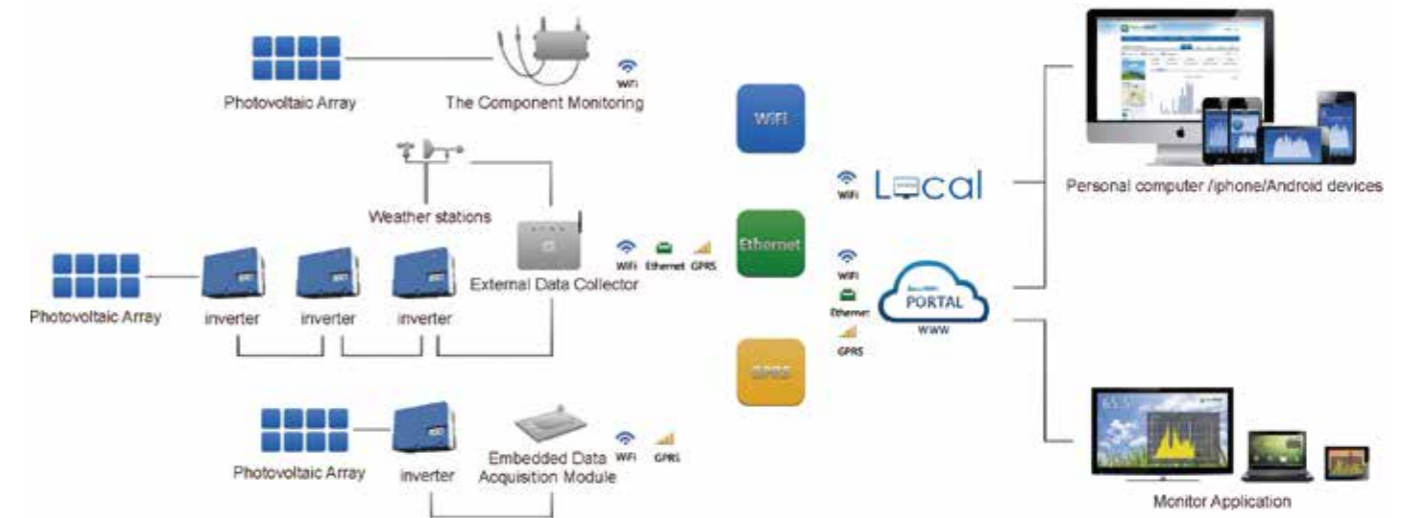
System power is used completely

◆ Solar Pumping System Design Software

- Feature:
- Human interface design, easy operation;
 - Contain the most countries' geography and climate information, strong practicability;
 - Superior and reliable system configuration algorithm;
 - Editable database of PV module and pump, be convenient for personalization or regional system design

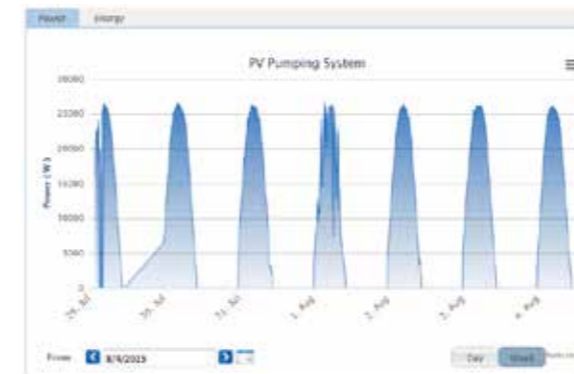
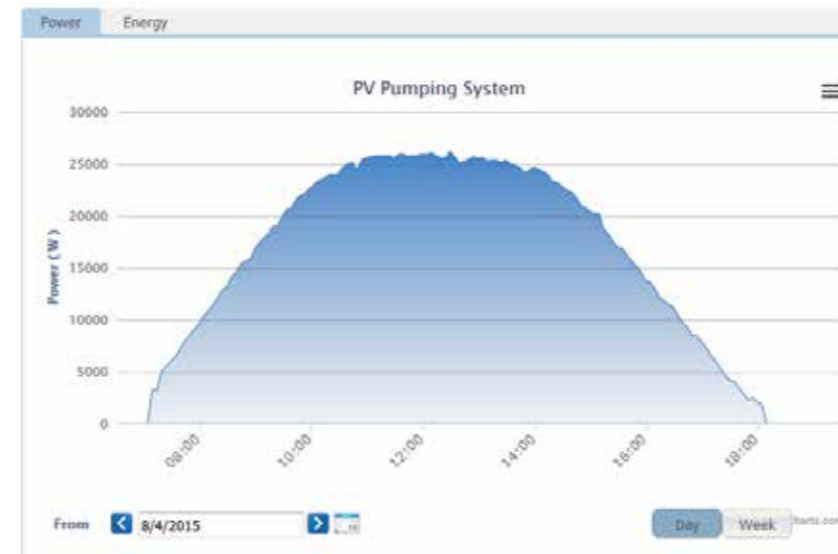


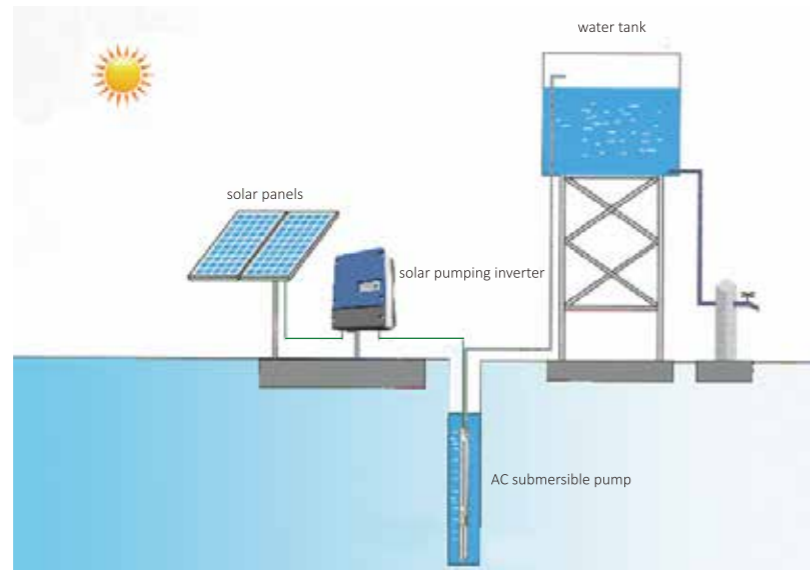
◆ Monitoring System



Features:

- Control the solar pumping inverter remotely
- Manage all solar pumping inverters and systems
- Check system operating status at any time
- Read all system information on PC, Iphone, Ipad and any other electronic device
- Get alarm record and error code once the system failed to operate
- Analyse the data to check if the system is in good working condition.

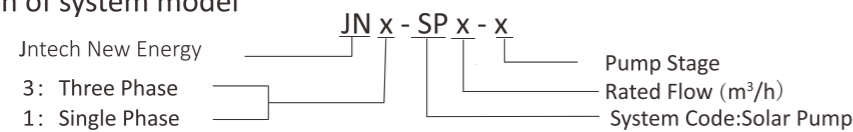




Remarks

- Polycrystalline 265W (Voc=37V,Isc=8A) solar panels are used in system configuration.
- The configuration is designed under environment temperature -20 ~ + 60 °C. We suggest to reduce number of solar panels of each string 21 pieces to 20 pieces if temperature is below 25°C.
- Configuration is designed with radiation 1000W / m² and rated working time of 5 hours and non-rated time of 3.2 hours.
- When single string exceeds 19 pieces, Please contact Jntech engineer for system configuration.
- The design head should be considered to be 1.2~1.5 times more than the real head according to varied location.

Definition of system model



Daily water requirement: 5 ~ 10 m³

System Model	Pump kW	Inverter kW	Solar Panels kW	Array	Rated Flow m ³ /h	Rated Head m	Rated Daily Water Output m ³ /day	Daily Water Output Range			
								m ³ /h	m	m ³ /day	
JN3-SP1-21	1.1	1.1	1.50	6*1	1	108	7	112	80	7	10
JN3-SP1-25	1.1	1.1	1.60	6*1		129	7	134	95	6	10
JN3-SP1-28	1.5	1.5	2.00	8*1		145	7	150	107	7	10
JN3-SP1-32	1.5	1.5	2.00	8*1		165	6	171	122	6	9
JN3-SP1-36	1.5	1.5	2.25	9*1		186	6	192	137	6	9
JN3-SP1-39	2.2	2.2	3.00	6*2		202	8	209	149	7	11
JN3-SP1-42	2.2	2.2	3.00	6*2		217	7	225	160	7	10
JN3-SP1-46	2.2	2.2	3.50	7*2		238	8	246	176	7	11
JN3-SP1-50	2.2	2.2	3.50	7*2		260	7	269	192	6	10

Daily water requirement: 10 ~ 20 m³

System Model	Pump kW	Inverter kW	Solar Panels kW	Array	Rated Flow m ³ /h	Rated Head m	Rated Daily Water Output m ³ /day	Daily Water Output Range			
								m ³ /h	m	m ³ /day	
JN3-SP3-15	1.1	1.1	1.50	6*1	3	61	17	72	47	14	20
JN3-SP3-18	1.1	1.1	1.75	7*1		74	16	87	57	14	19
JN3-SP3-22	1.5	1.5	2.00	8*1		91	15	106	70	13	18
JN3-SP3-27	2.2	2.2	3.00	6*2		111	18	130	87	16	21
JN3-SP3-32	2.2	2.2	3.50	7*2		131	18	154	102	16	21
JN3-SP3-38	3.0	3.0	4.00	8*2		157	17	183	122	15	20
JN3-SP3-43	3.0	3.0	4.50	9*2		178	17	207	139	15	20

Daily water requirement: 10~30 m³

System Model	Pump kW	Inverter kW	Solar Panels kW	Array	Rated Flow m ³ /h	Rated Head m	Rated Daily Water Output m ³ /day	Daily Water Output Range			
								m ³ /h	m	m ³ /day	
JN3-SP5-12	1.1	1.1	1.50	6*1	5	45	24	59	38	18	26
JN3-SP5-17	1.5	1.5	2.00	8*1		64	22	84	54	17	24
JN3-SP5-21	2.2	2.2	3.00	6*2		79	27	104	67	20	29
JN3-SP5-25	2.2	2.2	3.50	7*2		94	26	124	80	20	29
JN3-SP5-29	3.0	3.0	4.00	8*2		108	26	144	92	19	29
JN3-SP5-33	3.0	3.0	4.50	9*2		123	26	163	105	19	28
JN3-SP5-38	4.0	4.0	5.60	-		142	28	188	121	21	30
JN3-SP5-43	4.0	4.0	6.00	-		161	26	213	137	20	29

Daily water requirement: 30~60 m³

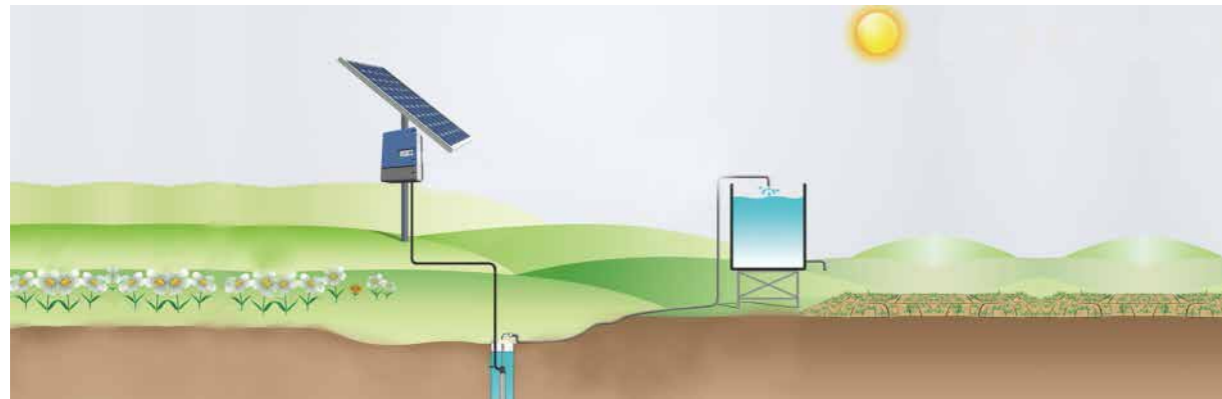
System Model	Pump kW	Inverter kW	Solar Panels kW	Array	Rated Flow m ³ /h	Rated Head m	Rated Daily Water Output m ³ /day	Daily Water Output Range			
								m ³ /h	m	m ³ /day	
JN3-SP8-7	1.1	1.1	1.50	6*1	8	27	41	31	20	33	53
JN3-SP8-10	1.5	1.5	2.00	8*1		39	38	45	29	31	49
JN3-SP8-12	2.2	2.2	3.00	6*2		47	47	54	35	38	61
JN3-SP8-15	2.2	2.2	3.50	7*2		59	43	68	44	35	56
JN3-SP8-18	3.0	3.0	4.00	8*2		71	41	81	53	34	53
JN3-SP8-21	4.0	4.0	5.60	-		83	49	95	62	41	64
JN3-SP8-25	4.0	4.0	6.00	-		99	44	113	74	37	57
JN3-SP8-30	5.5	5.5	7.50	15*2		119	49	136	88	40	64
JN3-SP8-37	5.5	5.5	8.00	16*2		147	40	167	109	33	52
JN3-SP8-44	7.5	7.5	10.50	20*2		174	44	199	129	36	58
JN3-SP8-50	7.5	7.5	11.00	21*2	198	41	226	147	34	53	

Daily water requirement: 50~90 m³

System Model	Pump kW	Inverter kW	Solar Panels kW	Array	Rated Flow m ³ /h	Rated Head m	Rated Daily Water Output m ³ /day	Daily Water Output Range			
								m ³ /h	m	m ³ /day	
JN3-SP12-5	1.5	1.5	2.00	8*1	12	25	55	29	18	51	74
JN3-SP12-7	2.2	2.2	3.00	6*2		35	58	40	25	56	80
JN3-SP12-10	3.0	3.0	4.00	8*2		50	55	58	36	51	74
JN3-SP12-13	4.0	4.0	5.60	-		66	58	76	48	55	78
JN3-SP12-15	5.5	5.5	7.50	15*2		76	78	88	55	53	97
JN3-SP12-18	5.5	5.5	8.00	16*2		91	60	105	66	57	81
JN3-SP12-21	7.5	7.5	10.00	19*2		106	68	123	77	64	91
JN3-SP12-25	7.5	7.5	11.60	20*2		126	60	146	92	56	80

Daily water requirement: 60~150 m³

System Model	Pump kW	Inverter kW	Solar Panels kW	Array	Rated Flow m ³ /h	Rated Head m	Rated Daily Water Output m ³ /day	Daily Water Output Range			
								m ³ /h	m	m ³ /day	
JN3-SP17-2	1.1	1.1	1.50	6*1	17	13.5	96	19	10	63	112
JN3-SP17-3	2.2	2.2	3.00	6*2		20.5	127	28.5	16	84	146
JN3-SP17-4	2.2	2.2	3.50	7*2		28.0	109	38	22	73	124
JN3-SP17-5	3.0	3.0	4.00	8*2		35.0	99	48	28	66	112
JN3-SP17-6	4.0	4.0	5.60	-		42.0	116	58	34	77	129
JN3-SP17-7	4.0	4.0	6.00	-		49.0	106	67	40	71	117
JN3-SP17-8	5.5	5.5	7.50	15*2		57.0	121	77	45	80	136
JN3-SP17-9	5.5	5.5	7.50	15*2		64.0	108	87	52	71	118
JN3-SP17-10	5.5	5.5	8.00	16*2		72.0	96	97	58	65	108
JN3-SP17-11	7.5	7.5	10.50	19*2		79.0	115	106	64	79	128
JN3-SP17-12	7.5	7.5	10.50	20*2		87.0	105	115	70	72	117
JN3-SP17-13	7.5	7.5	11.00	20*2		95.0	101	125	75	70	115
JN3-SP17-14	9.2	11.0	13.50	18*3		102.0	115	134	81	80	130
JN3-SP17-15	9.2	11.0	13.50	18*3		109.0	108	144	87	74	121
JN3-SP17-16	9.2	11.0	14.25	19*3		116.0	107	154	92	73	121
JN3-SP17-17	9.2	11.0	14.25	19*3		123.0	101	163	98	69	114
JN3-SP17-18	11.0	11.0	15.00	19*3		130.0	105	173	104	72	118
JN3-SP17-19	11.0	11.0	15.10	20*3		138.0	99	182	110	69	112
JN3-SP17-20	11.0	11.0	16.00	20*3		145.0	99	192	116	68	111
JN3-SP17-21	13.0	15.0	18.00	18*4		152.0	103	202	121	71	116
JN3-SP17-22	13.0	15.0	18.00	18*4		160.0	98	211	127	68	111
JN3-SP17-23	13.0	15.0	19.00	19*4		167.0	99	221	133	68	112
JN3-SP17-24	13.0	15.0	19.00	19*4		174.0	95	230	139	66	107
JN3-SP17-25	15.0	15.0	21.00	20*4		181.0	101	240	145	69	113
JN3-SP17-26	15.0	15.0	21.20	20*4		189.0	101	250	150	70	115



◆ Daily water requirement: 100~250 m³

System Model	Pump kW	Inverter kW	Solar Panels kW	Array	Rated Flow m ³ /h	Rated Head m	Rated Daily water Output m ³ /day	Daily Water Output Range						
								m ³ /h	m	m ³ /day	m ³ /day			
JN3-SP30-1	1.1	1.1	1.50	6*1	30	7.5	181	16	~	36	10	5.5	121	237
JN3-SP30-2	2.2	2.2	3.00	6*2		20	10.5				121	248		
JN3-SP30-3	3.0	3.0	4.00	8*2		30	16				107	217		
JN3-SP30-4	4.0	4.0	5.30	20*1		40	21				113	232		
JN3-SP30-5	5.5	5.5	7.50	15*2		50	27				121	246		
JN3-SP30-6	5.5	5.5	8.00	16*2		60	32				107	217		
JN3-SP30-7	7.5	7.5	10.00	20*2		70	37				121	246		
JN3-SP30-8	7.5	7.5	11.00	20*2		80	43				111	222		
JN3-SP30-9	9.2	11.0	13.50	18*3		90	48				121	244		
JN3-SP30-10	9.2	11.0	13.50	18*3		100	53				109	221		
JN3-SP30-11	9.2	11.0	14.25	19*3		110	59				104	210		
JN3-SP30-12	11.0	11.0	15.00	19*3		120	64				106	214		
JN3-SP30-13	11.0	11.0	15.00	19*3		129	69				103	208		
JN3-SP30-14	13.0	15.0	18.00	18*4		139	74				104	211		
JN3-SP30-15	13.0	15.0	19.00	19*4		149	80				103	206		
JN3-SP30-16	15.0	15.0	21.00	20*4		159	85				106	214		
JN3-SP30-17	15.0	15.0	22.00	22*4		169	90				105	212		
JN3-SP30-18	18.5	18.5	25.20	19*5		179	96				118	237		
JN3-SP30-19	18.5	18.5	25.20	19*5		189	101				112	226		
JN3-SP30-20	18.5	18.5	26.50	20*5		199	106				111	225		
JN3-SP30-21	18.5	18.5	26.50	20*5		209	112				106	213		
JN3-SP30-22	22.0	22.0	31.50	20*6		219	117				116	234		
JN3-SP30-23	22.0	22.0	31.50	20*6		229	122				111	224		
JN3-SP30-24	22.0	22.0	33.00	21*6		239	128				111	224		
JN3-SP30-25	22.0	22.0	33.00	21*6		249	133				107	215		

◆ Daily water requirement: 160~600 m³

System Model	Pump kW	Inverter kW	Solar Panels kW	Array	Rated Flow m ³ /h	Rated Head m	Rated Daily water Output m ³ /day	Daily Water Output Range						
								m ³ /h	m	m ³ /day	m ³ /day			
JN3-SP42-1	2.2	2.2	3.00	6*2	42	8.5	328	30	~	60	10.5	4	248	595
JN3-SP42-2	3.0	3.0	4.00	8*2		17.0	219				21.5	8.5	162	374
JN3-SP42-3	5.5	5.5	7.50	15*2		26.5	274				32.5	13	210	496
JN3-SP42-4	7.5	7.5	10.50	21*2		36.0	271				43	18	212	463
JN3-SP42-5	7.5	7.5	11.00	22*2		45.0	227				54	23	177	380
JN3-SP42-6	9.2	11.0	13.50	18*3		54.0	233				66	28	178	383
JN3-SP42-7	11.0	11.0	15.75	20*3		63.0	233				77	32	178	391
JN3-SP42-8	13.0	15.0	18.00	18*4		72.0	233				87	36	180	397
JN3-SP42-9	15.0	15.0	20.00	19*4		80.0	244				97	40	188	417
JN3-SP42-10	15.0	15.0	21.00	20*4		89.0	230				108	45	177	388
JN3-SP42-11	18.5	18.5	25.20	19*5		98.0	249				119	49	192	425
JN3-SP42-12	18.5	18.5	26.50	20*5		107.0	239				130	54	184	404
JN3-SP42-13	22.0	22.0	31.50	20*6		116.0	253				141	58	194	431
JN3-SP42-14	22.0	22.0	31.50	20*6		125.0	234				152	63	180	397
JN3-SP42-15	22.0	22.0	33.00	21*6		134.0	229				163	67	176	391
JN3-SP42-16	25.0	30.0	35.00	19*7		143.0	228				174	72	175	386
JN3-SP42-17	25.0	30.0	36.75	20*7		152.0	225				184	77	173	379
JN3-SP42-18	30.0	30.0	42.75	19*9		161.0	247				195	81	190	419
JN3-SP42-19	30.0	30.0	42.75	19*9		170.0	234				206	86	180	395
JN3-SP42-20	30.0	30.0	45.00	20*9		179.0	234				217	90	180	397
JN3-SP42-21	37.0	37.0	52.25	19*11		188.0	259				228	95	199	437
JN3-SP42-22	37.0	37.0	55.00	20*11		197.0	260				238	99	201	441

◆ Daily water requirement: 190~670 m³

System Model	Pump kW	Inverter kW	Solar Panels kW	Array	Rated Flow m ³ /h	Rated Head m	Rated Daily water Output m ³ /day	Daily Water Output Range						
								m ³ /h	m	m ³ /day	m ³ /day			
JN3-SP60-1	2.2	2.2	3.00	6*2	60	6.0	484	40	~	70	8.5	4	298	670
JN3-SP60-2-2	3.0	3.0	4.00	8*2		10.5	369				15.5	6.5	218	550
JN3-SP60-2	4.0	4.0	5.60			12.5	433				19	9	249	556
JN3-SP60-3	5.5	5.5	7.50	15*2		20.0	387				29	14	238	510
JN3-SP60-4	7.5	7.5	10.50	21*2		29.0	350				40	21	221	446
JN3-SP60-5	9.2	11.0	13.50	18*3		37.0	353				51	28	223	431
JN3-SP60-6	11.0	11.0	15.75	19*3		45.0	339				62	34	214	414
JN3-SP60-7	13.0	15.0	18.00	18*4		53.0	329				73	39	208	412
JN3-SP60-8-2	13.0	15.0	19.00	19*4		56.0	328				78	41	205	414
JN3-SP60-8	15.0	15.0	21.00	20*4		61.0	333				84	45	211	417
JN3-SP60-9-2	15.0	15.0	21.20	20*4		64.0	333				89	47	208	418
JN3-SP60-9	18.5	18.5	26.25	19*5		69.0	368				96	52	231	451
JN3-SP60-10	18.5	18.5	27.50	19*5		77.0	345				106	58	219	423
JN3-SP60-11	22.0	22.0	31.50	20*6		85.0	358				117	64	227	439
JN3-SP60-12	22.0	22.0	31.50	20*6		93.0	328				127	70	209	402
JN3-SP60-13	22.0	22.0	33.00	21*6		100.0	319				139	75	200	393
JN3-SP60-14	25.0	30.0	35.00	20*7		106.0	319				149	80	198	391
JN3-SP60-15	25.0	30.0	36.75	20*7		114.0	312				159	85	195	386
JN3-SP60-16	30.0	30.0	42.75	19*9		122.0	339				170	91	212	419
JN3-SP60-17	30.0	30.0	42.75	19*9		130.0	318				181	98	199	390
JN3-SP60-18	30.0	30.0	45.00	20*9		140.0	311				194	105	196	383
JN3-SP60-19	37.0	37.0	52.25	19*11		148.0	342				204	112	216	417
JN3-SP60-20	37.0	37.0	52.25	19*11		155.0	326				214	118	206	395
JN3-SP60-21	37.0	37.0	55.00	20*11		163.0	326				226	123	205	399

◆ Daily water requirement: 280~570 m³

System Model	Pump kW	Inverter kW	Solar Panels kW	Array	Rated Flow m ³ /h	Rated Head m	Rated Daily water Output m ³ /day	Daily Water Output Range						
								m ³ /h	m	m ³ /day	m ³ /day			
JN3-SP75-1	4.0	4.0	5.60	-	75	12.0	463	50	~	95	15.5	9	323	563
JN3-SP75-2	7.5	7.5	10.50	20*2		25.0	417				32	19	293	500
JN3-SP75-3	11.0	11.0	15.75	19*3		38.0	411				49	29	287	492
JN3-SP75-4	15.0	15.0	21.00	19*4		52.0	401				66.5	40	282	475
JN3-SP75-5	18.5	18.5	26.25	21*5		65.0	401				83	51	282	466
JN3-SP75-6	22.0	22.0	31.50	21*6		79.0	396				100	62	281	460
JN3-SP75-7	30.0	30.0	42.75	19*9		93.0	456				118	73	324	530
JN3-SP75-8	30.0	30.0	45.00	20*9		107.0	417				135	85	298	479
JN3-SP75-9	37.0	37.0	52.25	19*11		121.0	428				152	96	307	493
JN3-SP75-10	37.0	37.0	55.00	20*11		135.0	404				169	107	291	465
JN3-SP75-11	45.0	45.0	63.00	18*14		148.0	422				185	118	304	483
JN3-SP75-12	45.0	45.0	66.50	19*14		162.0	407				202	129	294	467
JN3-SP75-13	55.0	55.0	76.50	18*17		175.0	434				220	139	311	498
JN3-SP75-14	55.0	55.0	76.50	18*17		188.0	404				238	149	287	465
JN3-SP75-15	55.0	55.0	80.75	19*17		201.0	399				256	159	282	460
JN3-SP75-16	63.0	75.0	85.50	19*18		215.0	395				274	169	279	458
JN3-SP75-17	63.0	75.0	90.25	19*19		229.0	391				292	179	276	456
JN3-SP75-18	75.0	75.0	104.50	19*22		243.0	427				309	190	302	498
JN3-SP75-19	75.0	75.0	104.50	19*22		257.0	403				327	201	285	471
JN3-SP75-20	75.0	75.0	110.00	20*22		271.0	403				345	212	285	470

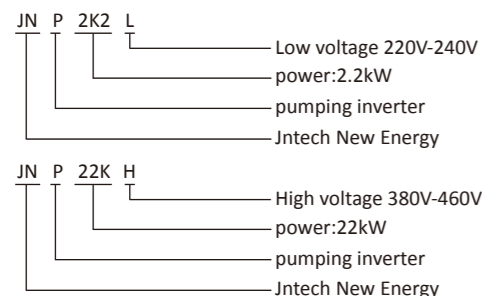
◆ Daily water requirement: 300~680 m³

System Model	Pump kW	Inverter kW	Solar Panels kW	Array	Rated Flow m ³ /h	Rated Head m	Rated Daily water Output m ³ /day	Daily Water Output Range						
								m ³ /h	m	m ³ /day	m ³ /day			
JN3-SP95-1	4.0	4.0	5.60	-	95	9.5	570	60	~	100	15.5	8	327	599
JN3-SP95-2	9.2	9.2	13.50	18*3		20.0	653				32	17	382	680
JN3-SP95-3	13.0	13.0	18.00	18*4		30.0	580				48.5	26	336	592
JN3-SP95-4	18.5	18.5	26.25	21*5		41.0	619				65	36	366	624
JN3-SP95-5	22.0	22.0	31.50	20*6		51.5	592				81.5	46	350	586
JN3-SP95-6	25.0	25.0	35.00	20*7		62.0	546				98	55	323	545
JN3-SP95-7	30.0	30.0	42.75	19*9		73.0	567				115	65	337	563
JN3-SP95-8	37.0	37.0	52.25	19*11		84.0	602				131	75	361	596
JN3-SP95-9	37.0	37.0	55.00	20*11		95.0	560				148	85	336	554
JN3-SP95-10	45.0	45.0	63.00	18*14		106.0	575				165	95	346	567
JN3-SP95-11	45.0	45.0	66.50	19*14		117.0	550				182	105	331	542
JN3-SP95-12	55.0	55.0	76.50	18*17		129.0	574				199	116	348	564
JN3-SP95-13	55.0	55.0	76.50	18*17		141.0	525				216	127	321	515
JN3-SP95-14	55.0	55.0	80.75	19*17		153.0	511				233	138	314	501

Product Features

- ◆ Drive power-matched three-phase AC pump
- ◆ Adopt advanced IGBT power module
- ◆ High conversion efficiency, low temperature rise, low noise, long lifespan
- ◆ Advanced MPPT technology, efficiency > 99%
- ◆ Fully automatic operation, it can store operation date for 10 years
- ◆ Perfect system protection, high reliability
- ◆ New design of anodized aluminum case
- ◆ LCD display
- ◆ Interface: RS485/GPRS
- ◆ Modular design, easy to install, operate, maintain

Definition of Model



Technical Parameters

Model	JNP1K1L	JNP1K5L	JNP2K2L	JNP3KL	JNP3K7L	JNP4KL	JNP2K2H	JNP3KH	JNP3K7H	JNP4KH	JNP5K5H	JNP7K5H
d.c. Input												
d.c. Max. Input Voltage	440Vdc					750Vdc		880Vdc				
Recommended MPPT Voltage	150~400Vdc					280~600Vdc		460~850Vdc				
d.c. Max. Input Current	8A	10A	14.6A	21A	24.6A	15A	5A	6.9A	9A	9A	12A	16.3A
Max. MPPT Efficiency	99%											
Number of String	1	1	2	2	2	2	2	2	2	2	2	3
a.c. Output												
Max. Motor Output Power	1.1kW	1.5kW	2.2kW	3kW	3.7kW	4kW	2.2kW	3kW	3.7kW	4kW	5.5kW	7.5kW
Rated Output Voltage	220~240Vac, three phase						380~460Vac, three phase					
Output Frequency Range	0~50/60Hz											
Rated Output Current	5.5A	7A	11A	14A	17A	20A	6A	7A	9A	10A	13A	18A
Other Parameters												
Weight	9.5kg	9.5kg	9.5kg	14.5kg	14.5kg	13.9kg	13.9kg	13.9kg	13.9kg	13.9kg	13.9kg	13.9kg
Dimension(L*W*H)	350*278*179mm			420*310*211mm			420*310*229mm					
Max. Efficiency	97%	97%	97%	97%	97%	97%	96%	97%	98%	98%	98%	98%
Protection Class	I											
Protection Level	IP65											
Operating Temperature	-25℃~+60℃; above 60℃ need derate operating											
Cooling Way	Natural Cooling											
Display	LCD											
Communication	RS485/GPRS											
Altitude	3000m; above 3000m need derate operating											
Noise Emission	< 50dB											
Compliance	EN50178; IEC/EN62109-1; IEC 61800											



Technical Parameters

Model	JNP11KH	JNP15KH	JNP18K5H	JNP22KH	JNP30KH	JNP37KH	JNP45KH	JNP55KH
d.c. Input								
d.c. Max. Input Voltage	880Vdc							
Recommended MPPT Voltage	460~850Vdc							
d.c. Max. Input Current	24.4A	33.3A	41.1A	49A	67A	82A	100A	122A
Max. MPPT Efficiency	99%							
Number of String	3	3	3	1	1	1	1	1
a.c. Output								
Max. Motor Output Power	11kW	15kW	18.5kW	22kW	30kW	37kW	45kW	55kW
Rated Output Voltage	380~460Vac, three phase							
Output Frequency Range	0~50/60Hz							
Rated Output Current	21A	29A	36A	42A	57A	71A	86A	104A
Other Parameters								
Weight	19.9kg	19.9kg	19.9kg	31.5kg	31.5kg	31.5kg	32.5kg	32.5kg
Dimension(L*W*H)	360*500*176mm			460*580*251mm				
Max. Efficiency	98%							
Protection Class	I							
Protection Level	IP65							
Operating Temperature	-25℃~+60℃; above 60℃ need derate operating							
Cooling Way	Force Cooling							
Display	LCD							
Communication	RS485/GPRS							
Altitude	3000m; above 3000m need derate operating							
Noise Emission	< 50dB							
Compliance	EN50178; IEC/EN62109-1; IEC 61800							



Technical Parameters

Model	JNP75KH	JNP90KH	JNP110KH	JNP132KH
d.c. Input				
d.c. Max. Input Voltage	880Vdc			
Recommended MPPT Voltage	460~850Vdc			
d.c. Max. Input Current	166A	205A	251A	287A
Max. MPPT Efficiency	99%			
Number of String	2	2	2	2
a.c. Output				
Max. Motor Output Power	75kW	90kW	110kW	132kW
Rated Output Voltage	380~460Vac,three phase			
Output Frequency Range	0~50/60Hz			
Rated Output Current	142A	171A	209A	251A
Other Parameters				
Weight	190kg	220kg	220kg	220kg
Dimension(L*W*H)	654*1210*465mm			
Max. Efficiency	98%			
Protection Class	I			
Protection Level	IP21			
Operating Temperature	-25 °C~+50 °C ; above 50 °C need derate operating			
Cooling Way	Force Cooling			
Display	LCD			
Communication	RS485/GPRS			
Altitude	3000m;above 3000m need derate operating			
Noise Emission	< 70dB			
Compliance	EN50178;IEC/EN62109-1;IEC 61800			



Technical Parameters

Model	JNP370LS	JNP550LS	JNP750LS	JNP1K1LS
d.c. Input				
d.c. Max. Input Voltage	450Vdc			
Recommended MPPT Voltage	80~400Vdc	80~400Vdc	120~400Vdc	150~400Vdc
d.c. Max. Input Current	5.6A	8.3A	7.5A	8.8A
Max. MPPT Efficiency	>99%			
Number of String	1			
a.c. Output				
Max. Motor Output Power	370W	550W	750W	1100W
Rated Output Voltage	220V , single phase			
Output Frequency Range	0~50/60Hz			
Rated Output Current	4A	5.5A	7.2A	10A
Other Parameters				
Weight	9.5kg	9.5kg	9.5kg	9.5kg
Dimension(L*W*H)	350*278*179mm			
Protection Class	I			
Protection Level	IP65			
Operating Temperature	-25 °C~+60 °C			
Cooling Way	Natural Cooling			
Display	LCD			
Communication	RS485/GPRS			
Altitude	3000m;above 3000m need derate operating			
Noise Emission	< 60dB			
Compliance	EN50178;IEC/EN62109-1			

Project reference



37kW solar pumping system in Pakistan

Pakistan is an energy deficient country .The energy crisis has greatly subdued the country's economic growth with billions of rupees in losses, particularly in the industrial and agricultural sectors. Power consumption has been growing steadily and an average annual increase of 7% has been postulated for the next four years. As a result of this power shortage,the agriculture sector has been facing acute irrigation water shortages. So the solar pumping system is the best choice for the agriculture irrigation.

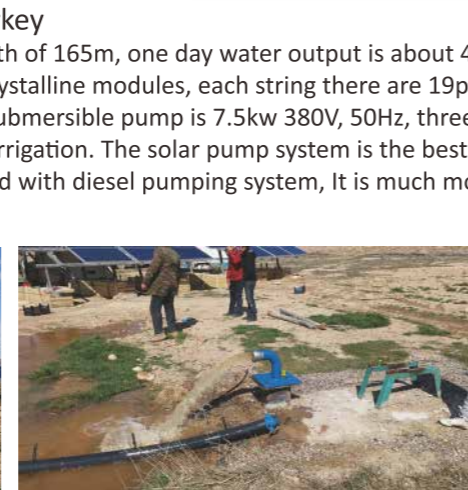
Location of the project: Multan,Pakistan
 Application: Agriculture irrigation
 Head: 75m
 Daily water output: 336~554 m³



22kW Solar & Utility Grid Hybrid Solar pumping system in Pakistan



Project Location	Gilgit Baltistan Province
Application	Agriculture irrigation
Head	160 feet
Daily Water Output	1500 litres/min
Running Time	12hours in Summer, 8 hours in Winter
Full Load Time	8 hours in Summer, 5 hours in Winter
Module Type	250W polycrystalline modules
Solar panels	6 strings, each string 20pcs
Solar pump Inverter	JNP22KH(22kW)
Submersible Pump	30HP



7.5kW solar pumping system in Turkey

This system is installed in Turkey with depth of 165m, one day water output is about 45 m³. This system we use 2 strings 250W, polycrystalline modules, each string there are 19pcs solar panels. So total 38pcs, 9500W solar panels. The submersible pump is 7.5kw 380V, 50Hz, three pahse pump. The application of this system is for farm irrigation. The solar pump system is the best choice for the area without grid electricity. Compared with diesel pumping system, It is much more cheaper clean, environmental, in long term.

45kW solar pumping system in Uzbekisatan

One of only two doubly landlocked countries in the word, and benefit form its special geographic position , Uzbekistan has a long sunshine time of up to 2,700 hours to 2,980 hours one year, and some areas can be up to 3,130 hours one day, summer sunshine time can be up to 15 hours, winter not less than 9 hours, so Uzbekistan's solar energy market has huge potential.

Uzbekistan is also a water-deficient country, as an ancient irrigated agricultural country, the scarcity of water resources had restricted the development of agriculture, especially cotton industry. Nowadays the solar pumping system's application is well-being of local people.

Four sets of 45kw JNTECH solar pumping system are installed at Ferghana, Uzbekisatan, which start to work automatically from 7:30 am to 18:30 pm, attract local and central government's high attention.



22kW solar water pumping system in Yemen

As important as electricity may seem, water is essential to life. Bringing life giving water from under the ground using only the power of the sun is very rewarding.

This 22kw solar pump system is installed in Hodeidah by Hefei JNTECH Yemen office . Total 30.6kw poly pv modules are used,22kw submersible pump Head is 100 m, Flow is 60m³/h, the matching 22kw Jntech solar pump inverter is with MPPT 460-850Vdc with IP65, 3 years warranty.

The environment temperature can be -25 C to +60 C , so the high temperature in Yemen is no problem for the working of our inverter. The system starts to work at 6:45 in the morning up to 5 o'clock in the afternoon. the 10 hours working time surprised a lot of other farmers there.





3.7kW solar pumping system in USA



11 kW solar pumping system in USA



4 kW solar pumping system in Chile



18.5 kW solar pumping system in Jordan



15kW solar pumping system in Pakistan



18.5kW solar pumping system in Pakistan



1.5kW solar pumping system in South Africa



4kW solar pumping system in Morocco



45kW solar pumping system in Yemen



45kW solar pumping system in Yemen



18.5kW solar pumping system in Mexico



2.2kW solar pumping system in Mexico



5.5kW solar pumping system in Turkey



5.5kW solar pumping system in Jordan



1.5kW solar pumping system in Bangladesh



18.5kW solar pumping system in China



2.2kW solar pumping system in Algeria



3kW solar pumping system in Kenya



7.5kW solar pumping system in Jiangsu China



7.5kW solar pumping system in Jilin China



3.7kW solar pumping system in Cambodia



2.2kW solar pumping system in Zambia



11kW solar pumping system in Xinjiang China



18.5kW solar pumping system in China