



- CE, TUV, ISO9001, ISO14001, OHSAS18001
- AAA credit management system
- Third level qualification of power project construction
- National high-tech enterprises



Jntech Renewable Energy Co., Ltd.

📍 No.28 Taiyuan Road Hefei Anhui China 230051
 ☎️ +86-551-62930323 📠 +86-551-65393686
 ✉️ sales@jnnewenergy.com 🌐 www.jntechenergy.com

2020-V.1.0

Solar Pump Solution

Professional solar pump inverter and system provider

application

- solar agricultural irrigation
- solar aeration system
- solar water treatment system
- desert control
- pasture animal husbandry
- scenic fountain etc.



Jntech Renewable Energy Co., Ltd

jntech



Service

**Online Service Time
24 Hours 7 Days**

- Marketing support
- Technical service
- Training service
- Pro club



Jntech in Worldwide

Up to now, Jntech has installed solar pump inverter & solar pump system in more than 60 countries all over the world. Jntech R&D and manufacturing is going to the world!



Brazil	USA	Algeria	Germany	Australia	Mexico
Venezuela	Canada	Morocco	Arab	Thailand	Sudan
Colombia	South Africa	Nigeria	Pakistan	Vietnam	Turkey
Argentina	Kenya	UK	India	Indonesia	Syrian
Peru	Egypt	Ukraine	Kazakhstan	Philippines	Cambodia

INTRODUCTION

JNTECH RENEWABLE ENERGY CO., LTD was set up in 2006, is an international high-tech enterprise, which integrate intelligent power electronics products' R&D, manufacture, sales and service, with branches at different countries and regions in Pakistan, Kenya, Sudan, Dubai, Philippine, Morocco and Mexico.

Rely on Chinese famous technology university's human resource and technical advantage, JNTECH upgrades products and technology through enterprise, university, research cooperation, owns more than 60 solar patents, participates to set China Solar Standards; JNTECH developed solar off grid inverter, solar pumping inverter, solar household energy storage inverter and related system are widely used in more than 60 countries . JNTECH has been listed in the bidding catalogue and preferred brand of internationa projects by IBRD, UN, FAO, NGOs, etc.Over the years, "JNTECH" brand enjoys a high reputation in the industry.

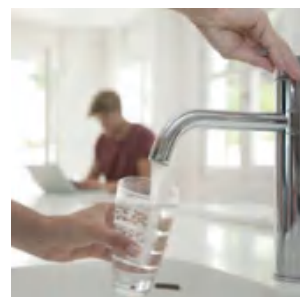
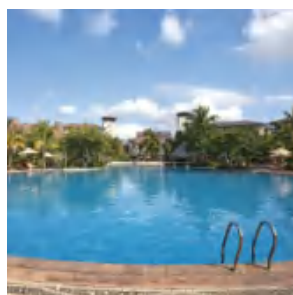
JNTECH exerts to become the outstanding international solar solution provider for intelligent solar energy products, solar irrigation and water treatment system, solar ecological treatment systems. Adhering to the idea of "Creating green energy future, Ensure the sustainable social development", JNTECH takes scientific development view as guideline creating green eco-friendly new energy as duty, keeps serving society, people and the national.



Hybrid solar pump system

- High-efficiency ● Safe ● Maintenance-free

System application



◆ System Application

Solar pump system can be applied in area with sunshine and seras lack of electricity.

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

◆ System Introduction (AC system)

Solar pump system consists of four parts: solar panels, solar pumping inverter, three-phase AC pump and water storage device. The solar pump 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 pump system fulfills concept of low carbon,energy conservation, environmental protection to improve the living standard in water-deficient area.

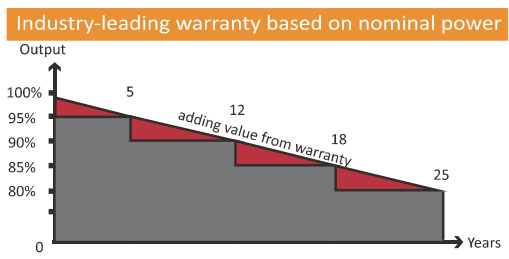
◆ System Features

- 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 & 1-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 competito
- ROI is only less than 2 years compared to diesel generator
- Full automatic unattended operation with perfect protection functions for long lifespan 25 years
- 2 years warranty for complete system, 10 years for PV modules

Main Devices of Solar Pump System

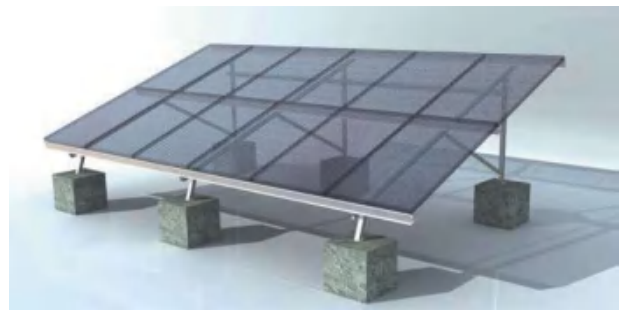
◆ Solar Panels

Based on nominal power(p_{nom})
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 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 Pump Inverter

- AC single phase/three phase solar pump inverter;
- Output voltage 220V~230V ac /380~460V ac;
- Power of low voltage ranges from 0.37kw to 4kw;
- Power of high voltage ranges from 2.2kw to 132kw.



◆ AC Pump

In order to keep high efficiency of whole system, please use all matching pumps from Jntech . We take single phase/ three phase AC submersible pumps as example, for solar pump 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

- Domestic or international brand
- Warranty can extend max. 3 years



Accessories of Solar Pump System

◆ PV Combiner Box

Jntech PV combiner box shall be used for solar pump 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

In some complex, high lift, long-distance water conveyance and irrigation system, we need to collect and control the application of water pressure, flow, location information, so we designed the device can get water level information of pump system and make the system stable and safe .

Features

- Remote wireless communication based on RTU, no communication cost, stable and reliable;
- Independent photovoltaic power supply, wireless complex wiring;
- The maximum 5km stable communication can be realized;
- RS484 communication, plug and play; ;



◆ 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.

Main parameters:

- AC Max. input voltage: 700Vdc
- Max. input current: 22A、 44A、 125A
- Protection class: IP65
- Frequency range: 0-60Hz



◆ 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;
- Keep the pump working in rainy weather and at night;
- Built-in DC circuit breaker, wall-mounting installation, easy operation.

Main parameters:

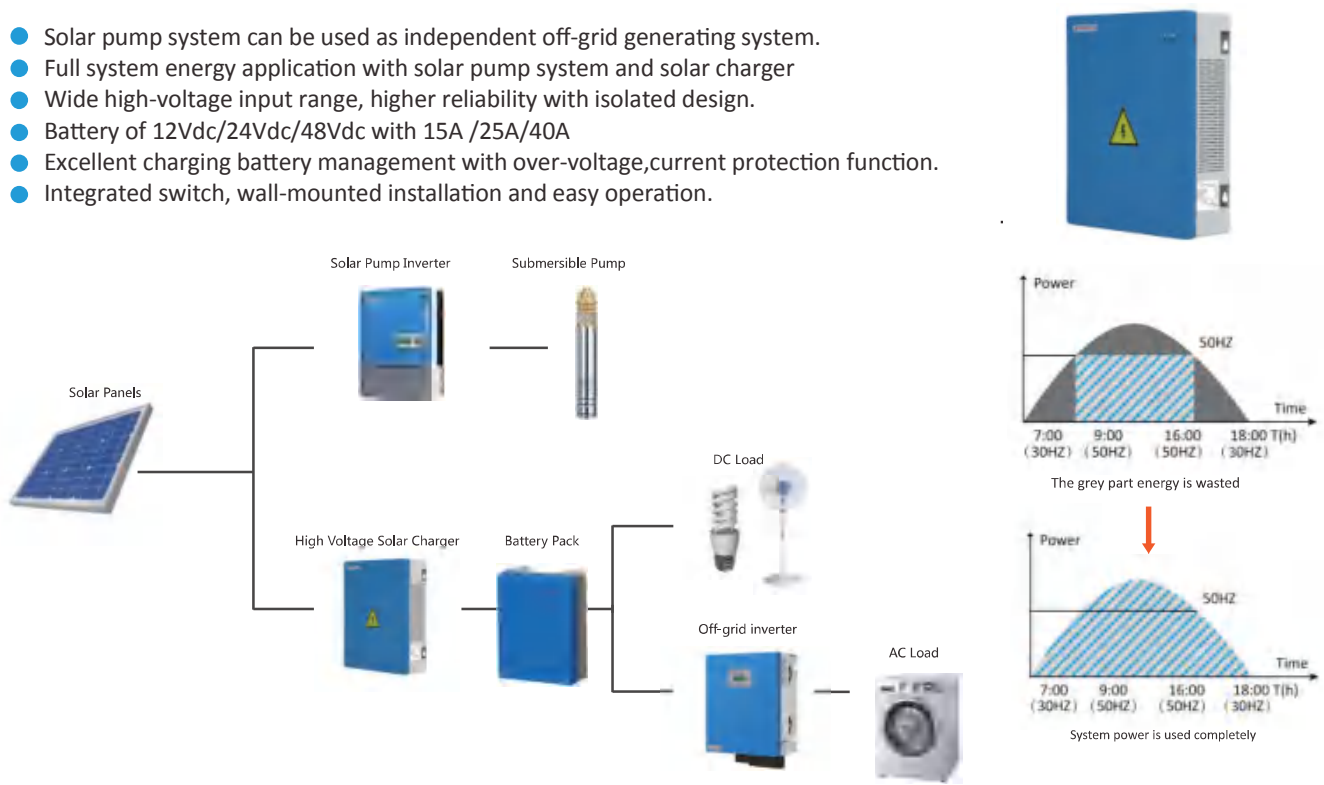
- AC input Voc: 360Vdc~460Vdc(3PH)
- DC Max. input current: 16.3A、 41.1A、 83A、 122A
- Protection class: IP21(JNPH4AR) /IP65(JNPH1AR、 JNPH2AR、 JNPH3AR、 JNPH3AR-S)
- Operating temp. : -20~60 °C



Main Devices of Solar Pump System

High Voltage Solar Charger

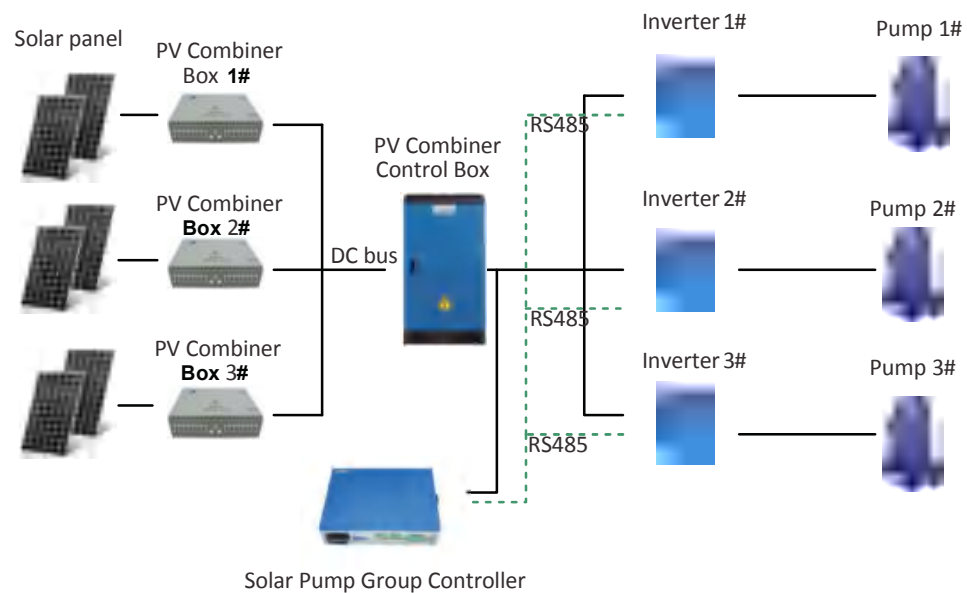
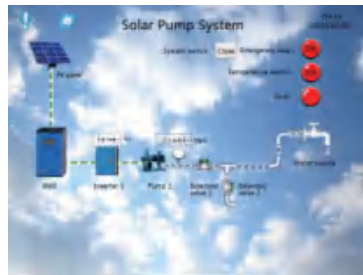
- Features:
- Solar pump system can be used as independent off-grid generating system.
 - Full system energy application with solar pump system and solar charger
 - Wide high-voltage input range, higher reliability with isolated design.
 - Battery of 12Vdc/24Vdc/48Vdc with 15A /25A/40A
 - Excellent charging battery management with over-voltage,current protection function.
 - Integrated switch, wall-mounted installation and easy operation.



Solar Pump Group Controller

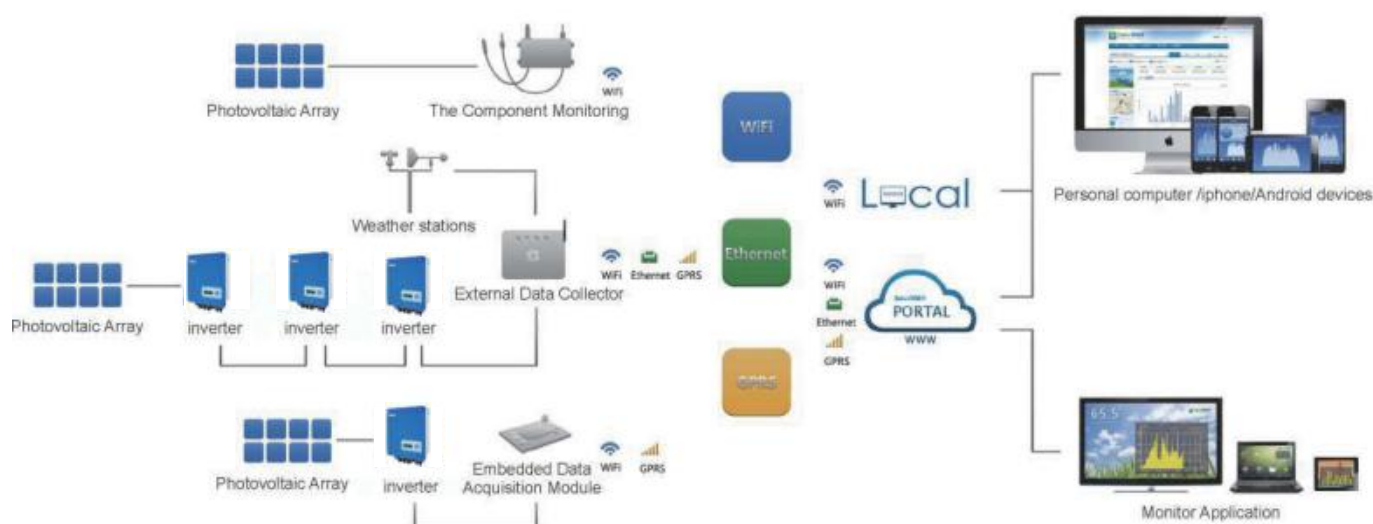
Solar pump projects with large flow, high head with multi-level water lifting, multi-system pipeline parallel.Solar large scale pointer type sprinkler irrigation system, solar dripping irrigation system.

- Functions:
- Real time energy scheduling and decrease significantly PV module cost.
 - Realize system stable operation for lifting head over 1000m.
 - Efficiency is 20% higher than traditional individual system.

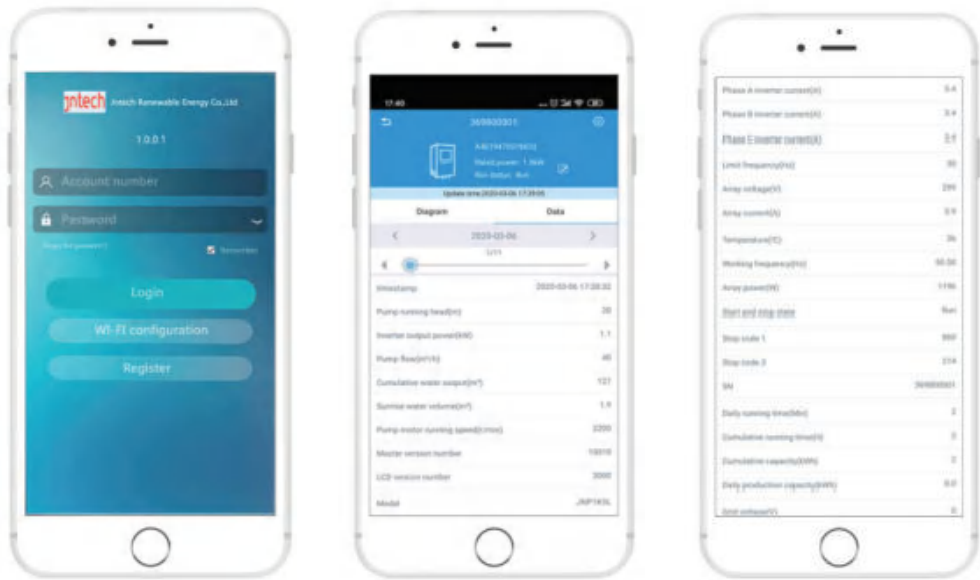


Accessories of Solar Pump System

Monitoring System



- Features:
- Control the solar pump inverter remotely
 - Manage all solar pump 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.



Solar Aeration System



Solar Aeration System

System application

- Parks, wetlands, lakes, etc. landscape water treatment
- Rivers, lakes, etc. surface water purification
- Fish and shrimp farming etc.



System features

- Solar power supply all day, zero-cost operation throughout the year, green, energy-saving, environmental friendly;
- Automatic intelligent switch according to the intensity of light, adjust the aerobic power, no need for manualmanagement throughout the year;
- Compared to traditional utility grid aeration equipment, no electric shock, safety;
- The core components have a service life up to 15 years to prevent environmental pollution and ecological damage;
- The metal parts of the system are made of aluminum alloy and stainless steel, which are durable and rust-proof;
- Energy storage and non-storage systems are available according to customer requirements.

System parameter

Name	Model	Quantity of panels	PV input power	MPPT voltage range	Model of inverter	Model of aeration aerator	Remote control	GPRS
		(pcs)	(W)	(V)				
Solar pumping inverter floating module	JNAS370L-V1	2	500-550	50-110	JNP370LS-V1\ JNP370L-V1	JNFD-PY-280 JNFD-PQ-250	Optional	Optional
	JNAS550L-V1	2	700-720	80-160	JNP550LS-V1\ JNP550L-V1	JNFD-PY-490 JNFD-PQ-550		
	JNAS750L-V1	4	1000-1200	105-400	JNP750L-V5	JNFB-SC-750 JNFB-YL-750 JNFB-PY-750 JNFB-PQ-750		
	JNAS1K1L-V1	6	1680-1980	130-400	JNP1K1L-V5	JNFD-PY-490 JNFD-PQ-550 JNFD-SC-1100 JNFD-YL-1100 JNFD-PY-1100 JNFB-PQ-1100		
	JNAS1K5L-V1	8	2240-2640	150-400	JNP1K5L-V5	JNFB-SC-750 JNFB-YL-750 JNFB-PY-750 JNFB-PQ-750 JNFB-SC-1500 JNFB-PY-1500 JNFB-PQ-1500 JNFB-SL-1500		
	JNAS2K2L-V1	10	2800-3300	150-400	JNP2K2L-V5	JNFD-PY-490 JNFD-PQ-550 JNFB-SC-2200 JNFB-YL-2200 JNFB-PQ-2200 JNFD-SL-2200		

Solar Sprinkling Irrigation System



Solar sprinkling irrigation solutions

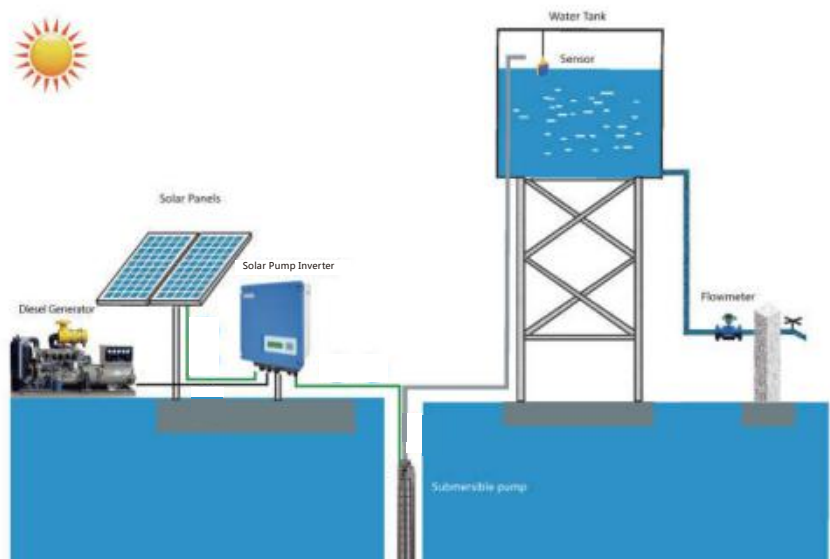
System feature

- The solar sprinkling irrigation power supply system is specially designed for the power supply of the sprinkling irrigation equipment with high product integration and advanced technology.
- The power supply of the system adopts solar direct drive technology, which maximizes the scale of energy storage part and greatly reduces the system cost.
- Built-in MPPT technology to maximize the use of solar.
- Wide MPPT range, flexible PV input.
- The combination of hardware and software can realize the constant pressure control of sprinkler water flow, which can greatly improve the system life and work stability.
- The solar sprinkling irrigation power supply system supports multi-channel signal input and can monitor the pressure, flow of the system in real time.
- Support grid and Diesel generator hybrid supply, solar priority seamless switching, energy saving, achieve 24 hours of uninterrupted system work.

Main specification parameters

Index	Model	JNG55K	JNG75K	JNG132K	Note
Main features of the irrigation equipment	The length of the truss	150~300m	300~450m	450~600m	Multiple specifications are available
	Rate of flow	100~150m³/h	150~200m³/h	200~300m³/h	
	Walking motor	0.75kW	1.1kW	1.5kW	
	Booster pump	1.1kW	1.1kW	2.2kW	
	Dosing pump	0.37kW	0.55kW	1.1kW	
Area	Sprinkling irrigation area	100~425 acres	425 ~950 acres	950~1700 acres	None
pv input	PV input	100kWp	150kWp	200kWp	None
	Direct current distribution	4 sets	5 sets	6 sets	Including bus and charging module
Sprinkling power system	DC power	JNP55kH	JNP75kH	JNP132kH	None
	Off grid power	JNF15KLF/48-V2	JNF20KLF/48-V2	JNF30KLF/48-V2	4 pcs in series , Lithium battery is optional Energy distribution , group control , data collection , system operation , status control
	Energy storage system	12V100Ah 4 pcs	12V100Ah 4 pcs	12V100Ah 4 pcs	
	Group controller	JNPGCH-V1	JNPGCH-V1	JNPGCH-V1	

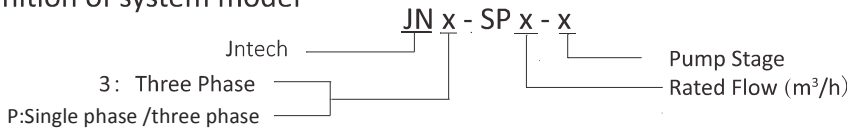
Solar Pump System Configuration



Remarks

- Polycrystalline 400 W (Vmp=40.6V , Voc=49.0V, Isc=10.32A) solar panels are used in system configuration.
- 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 17 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 (#:not optimal configuration)

System Model	Pump	Inverter	Solar Panels	Array	Rated Flow	Rated Head	Rated Daily Water Output	Daily Water Output Range								
	kW	kW	kW		m³/h	m	m³/day	m³/h		m		m³/day				
JNP-SP1-21	1.1	1.1	1.60	4*1	1	108	7	0.8	~	1.8	112	80	7	~	10	
JNP-SP1-25	1.1	1.1	1.60	4*1		129	7				134	95	6		10	
JNP-SP1-28	1.5	1.5	2.00	5*1		145	7				150	107	7		10	
JNP-SP1-32	1.5	1.5	2.00	5*1		165	6				171	122	6		9	
JNP-SP1-36	1.5	1.5	2.40	6*1		186	6				192	~	137		6	9
JNP-SP1-39	2.2	2.2	2.80	7*1		202	8				209	149	7		11	
JNP-SP1-42	2.2	2.2	3.20	8*1		217	7				225	160	7		10	
JNP-SP1-46	2.2	2.2	3.20	8*1		238	8				246	176	7		11	
JNP-SP1-50	2.2	2.2	3.20	8*1			260				7				269	192

Daily water requirement: 10~20 m³ (#:not optimal configuration)

System Model	Pump	Inverter	Solar Panels	Array	Rated Flow	Rated Head	Rated Daily water Output	Daily Water Output Range								
	kW	kW	kW		m³/h	m	m³/day	m³/h		m		m³/day				
JNP-SP3-15	1.1	1.1	1.60	4*1	3	61	17	2.4	~	3.6	72	47	14	20		
JNP-SP3-18	1.1	1.1	1.60	4*1		74	16				87	57	14	19		
JNP-SP3-22	1.5	1.5	2.00	5*1		91	15				106	70	13	18		
JNP-SP3-27	2.2	2.2	2.80	7*1		111	18				130	~	87	16	~	21
JNP-SP3-32	2.2	2.2	3.20	8*1		131	18				154	102	16	21		
JNP-SP3-38	3.0	3.0	4.00	10*1 [#]		157	17				183	122	15	20		
JNP-SP3-43	3.0	3.0	4.40	11*1 [#]		178	17				207	139	15	20		

Daily water requirement: 10~30 m³ (#:not optimal configuration)

System Model	Pump	Inverter	Solar Panels	Array	Rated Flow	Rated Head	Rated Daily water Output	Daily Water Output Range						
	kW	kW	kW		m³/h	m	m³/day	m³/h		m		m³/day		
JNP-SP5-12	1.1	1.1	1.60	4*1	5	45	24	3	~	5.5	59	38	18	26
JNP-SP5-17	1.5	1.5	2.00	5*1		64	22				84	54	17	24
JNP-SP5-21	2.2	2.2	2.80	7*1		79	27				104	67	20	29
JNP-SP5-25	2.2	2.2	3.20	8*1		94	26				124	80	20	29
JNP-SP5-29	3.0	3.0	4.00	10*1 #		108	26				144	92	19	29
JNP-SP5-33	3.0	3.0	4.40	11*1 #		123	26				163	105	19	28
JNP-SP5-38	4.0	4.0	5.60	14*1		142	28				188	121	21	30
JNP-SP5-43	4.0	4.0	5.60	14*1		161	26				213	137	20	29

Daily water requirement: 30~60 m³ (#:not optimal configuration)

System Model	Pump	Inverter	Solar Panels	Array	Rated Flow	Rated Head	Rated Daily water Output	Daily Water Output Range									
	kW	kW	kW		m³/h	m	m³/day	m³/h		m		m³/day					
JNP-SP8-7	1.1	1.1	1.60	4*1	8	27	41	6	~	10	31	20	33	~	53		
JNP-SP8-10	1.5	1.5	2.00	5*1		39	38				45	29	31		49		
JNP-SP8-12	2.2	2.2	2.80	7*1		47	47				54	35	38		61		
JNP-SP8-15	2.2	2.2	3.20	8*1		59	43				68	44	35		56		
JN3-SP8-18	3.0	3.0	4.00	10*1 #		71	41				81	53	34		53		
JN3-SP8-21	4.0	4.0	5.20	14*1		83	49				95	~	62		41	~	64
JN3-SP8-25	4.0	4.0	5.60	14*1		99	44				113	74	37		57		
JN3-SP8-30	5.5	5.5	6.40	16*1 #		119	49				136	88	40		64		
JN3-SP8-37	5.5	5.5	6.40	16*1 #		147	40				167	109	33		52		
JN3-SP8-44	7.5	7.5	11.20	14*2		174	44				199	129	36		58		
JN3-SP8-50	7.5	7.5	11.20	14*2	198	41	226	147	34	53							

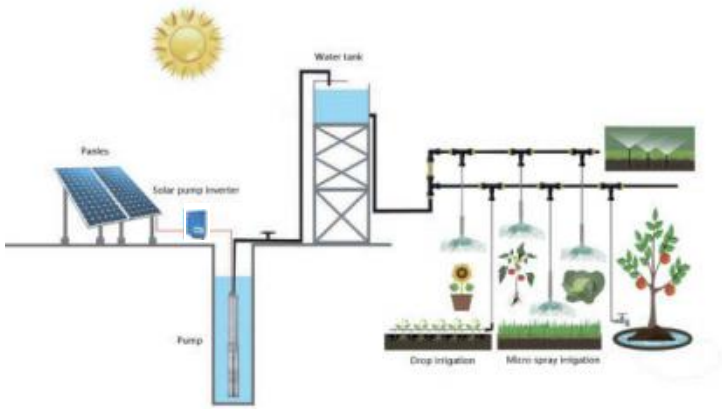
Daily water requirement: 50~90 m³ (#:not optimal configuration)

System Model	Pump	Inverter	Solar Panels	Array	Rated Flow	Rated Head	Rated Daily water Output	Daily Water Output Range								
	kW	kW	kW		m³/h	m	m³/day	m³/h			m			m³/day		
JNP-SP12-5	1.5	1.5	2.00	5*1	12	25	55	8	~	16	29	~	18	51	~	74
JNP-SP12-7	2.2	2.2	2.80	7*1		35	58				40		25	56		80
JN3-SP12-10	3.0	3.0	4.00	10*1		50	55				58		36	51		74
JN3-SP12-13	4.0	4.0	5.20	13*1 #		66	58				76		48	55		78
JN3-SP12-15	5.5	5.5	6.40	16*1 #		76	78				88		55	53		97
JN3-SP12-18	5.5	5.5	6.40	16*1 #		91	60				105		66	57		81
JN3-SP12-21	7.5	7.5	11.20	14*2		106	68				123		77	64		91
JN3-SP12-25	7.5	7.5	11.20	14*2		126	60				146		92	56		80

Daily water requirement: 60~150 m³ (#:not optimal configuration)

System Model	Pump	Inverter	Solar Panels	Array	Rated Flow	Rated Head	Rated Daily water Output	Daily Water Output Range								
	kW	kW	kW		m³/h	m	m³/day	m³/h		m		m³/day				
JNP-SP17-2	1.1	1.1	1.60	4*1	17	13.5	96	10	~	20	19	10	63	112		
JNP-SP17-3	2.2	2.2	2.80	7*1		20.5	127				28.5	16	84	146		
JNP-SP17-4	2.2	2.2	3.20	8*1		28.0	109				38	22	73	124		
JN3-SP17-5	3.0	3.0	4.00	10*1 #		35.0	99				48	28	66	112		
JN3-SP17-6	4.0	4.0	5.20	14*1		42.0	116				58	34	77	129		
JN3-SP17-7	4.0	4.0	5.20	14*1		49.0	106				67	40	71	117		
JN3-SP17-8	5.5	5.5	6.40	16*1 #		57.0	121				77	45	80	136		
JN3-SP17-9	5.5	5.5	6.40	16*1 #		64.0	108				87	52	71	118		
JN3-SP17-10	5.5	5.5	6.40	16*1 #		72.0	96				97	58	65	108		
JN3-SP17-11	7.5	7.5	11.20	14*2		79.0	115				106	64	79	128		
JN3-SP17-12	7.5	7.5	11.20	14*2		87.0	105				115	70	72	117		
JN3-SP17-13	7.5	7.5	11.20	14*2		95.0	101				125	75	70	115		
JN3-SP17-14	9.2	11.0 #	15.60	13*3		102.0	115				134	~	81	80	~	130
JN3-SP17-15	9.2	11.0 #	15.60	13*3		109.0	108				144	87	74	121		
JN3-SP17-16	9.2	11.0 #	15.60	13*3		116.0	107				154	92	73	121		
JN3-SP17-17	9.2	11.0 #	15.60	13*3		123.0	101				163	98	69	114		
JN3-SP17-18	11.0	11.0	16.80	14*3		130.0	105				173	104	72	118		
JN3-SP17-19	11.0	11.0	16.80	14*3		138.0	99				182	110	69	112		
JN3-SP17-20	11.0	11.0	16.80	14*3		145.0	99				192	116	68	111		
JN3-SP17-21	13.0	15.0 #	18.00	15*3		152.0	103				202	121	71	116		
JN3-SP17-22	13.0	15.0 #	18.00	15*3		160.0	98				211	127	68	111		
JN3-SP17-23	13.0	15.0 #	19.00	15*3		167.0	99				221	133	68	112		
JN3-SP17-24	13.0	15.0 #	19.00	15*3		174.0	95				230	139	66	107		
JN3-SP17-25	15.0	15.0	22.40	14*4		181.0	101				240	145	69	113		
JN3-SP17-26	15.0	15.0	22.40	14*4		189.0	101				250	150	70	115		

Solar Pump System Configuration



◆ Daily water requirement:100~250 m³ (#:not optimal configuration)

System Model	Pump	Inverter	Solar Panels	Array	Rated Flow	Rated Head	Rated Daily water Output	Daily Water Output Range						
	kW	kW	kW		m ³ /h	m	m ³ /day	m ³ /h		m		m ³ /day		
JN3-SP30-1	1.1	1.1	1.60	4*1	30	7.5	181	16	~	36	10	5.5	121	237
JN3-SP30-2	2.2	2.2	2.80	7*1		15.0	181				20	10.5	121	248
JN3-SP30-3	3.0	3.0	4.00	10*1 [#]		22.0	165				30	16	107	217
JN3-SP30-4	4.0	4.0	5.20	14*1		29.0	175				40	21	113	232
JN3-SP30-5	5.5	5.5	6.40	16*1 [#]		37.0	195				50	27	121	246
JN3-SP30-6	5.5	5.5	6.40	16*1 [#]		44.0	165				60	32	107	217
JN3-SP30-7	7.5	7.5	11.20	14*2		52.0	183				70	37	121	246
JN3-SP30-8	7.5	7.5	11.20	14*2		59.0	169				80	43	111	222
JN3-SP30-9	9.2	11.0 [#]	15.60	13*3		66.0	185				90	48	121	244
JN3-SP30-10	9.2	11.0 [#]	15.60	13*3		74.0	165				100	53	109	221
JN3-SP30-11	9.2	11.0 [#]	15.60	13*3		81.0	159				110	59	104	210
JN3-SP30-12	11.0	11.0	16.80	14*3		88.0	162				120	64	106	214
JN3-SP30-13	11.0	11.0	16.80	14*3		96.0	156				129	69	103	~ 208
JN3-SP30-14	13.0	15.0 [#]	18.00	15*3		103.0	158				139	74	104	211
JN3-SP30-15	13.0	15.0 [#]	18.00	15*3		110.0	156				149	80	103	206
JN3-SP30-16	15.0	15.0	22.40	14*4		118.0	161				159	85	106	214
JN3-SP30-17	15.0	15.0	22.40	14*4		125.0	159				169	90	105	212
JN3-SP30-18	18.5	18.5	28.00	14*5		132.0	180				179	96	118	237
JN3-SP30-19	18.5	18.5	28.00	14*5		140.0	170				189	101	112	226
JN3-SP30-20	18.5	18.5	28.00	14*5		147.0	169				199	106	111	225
JN3-SP30-21	18.5	18.5	30.00	15*5		155.0	161				209	112	106	213
JN3-SP30-22	22.0	22.0	33.60	14*6		162.0	176				219	117	116	234
JN3-SP30-23	22.0	22.0	33.60	14*6		169.0	169				229	122	111	224
JN3-SP30-24	22.0	22.0	33.60	14*6		177.0	169				239	128	111	224
JN3-SP30-25	22.0	22.0	33.60	14*6		184.0	162				249	133	107	215

◆ Daily water requirement: 160~600 m³ (#:not optimal configuration)

System Model	Pump	Inverter	Solar Panels	Array	Rated Flow	Rated Head	Rated Daily water Output	Daily Water Output Range						
	kW	kW	kW		m ³ /h	m	m ³ /day	m ³ /h		m		m ³ /day		
JN3-SP42-1	2.2	2.2	2.80	7*1	42	8.5	328	30	~	60	10.5	4	248	595
JN3-SP42-2	3.0	3.0	4.00	10*1 #		17.0	219				21.5	8.5	162	374
JN3-SP42-3	5.5	5.5	6.40	16*1 #		26.5	274				32.5	13	210	496
JN3-SP42-4	7.5	7.5	11.20	14*2		36.0	271				43	18	212	463
JN3-SP42-5	7.5	7.5	11.20	14*2		45.0	227				54	23	177	380
JN3-SP42-6	9.2	11.0 #	15.60	13*3		54.0	233				66	28	178	383
JN3-SP42-7	11.0	11.0	16.80	14*3		63.0	233				77	32	178	391
JN3-SP42-8	13.0	15.0 #	18.00	15*3		72.0	233				87	36	180	397
JN3-SP42-9	15.0	15.0	22.40	14*4		80.0	244				97	40	188	417
JN3-SP42-10	15.0	15.0	22.40	14*4		89.0	230				108	45	177	388
JN3-SP42-11	18.5	18.5	28.00	14*5		98.0	249				119	49	192	425
JN3-SP42-12	18.5	18.5	30.00	15*5		107.0	239				130	54	184	404
JN3-SP42-13	22.0	22.0	33.60	14*6		116.0	253				141	58	194	431
JN3-SP42-14	22.0	22.0	33.60	14*6		125.0	234				152	63	180	397
JN3-SP42-15	22.0	22.0	33.60	14*6		134.0	229				163	67	176	391
JN3-SP42-16	25.0	30.0 #	33.60	14*6		143.0	228				174	72	175	386
JN3-SP42-17	25.0	30.0 #	33.60	14*6		152.0	225				184	77	173	379
JN3-SP42-18	30.0	30.0	39.20	14*7		161.0	247				195	81	190	419
JN3-SP42-19	30.0	30.0	39.20	14*7		170.0	234				206	86	180	395
JN3-SP42-20	30.0	30.0	42.00	15*7		179.0	234				217	90	180	397
JN3-SP42-21	37.0	37.0	50.40	14*9		188.0	259				228	95	199	437
JN3-SP42-22	37.0	37.0	54.00	15*9		197.0	260				238	99	201	441

◆ Daily water requirement: 190~670 m³ (#:not optimal configuration)

System Model	Pump	Inverter	Solar Panels	Array	Rated Flow	Rated Head	Rated Daily water Output	Daily Water Output Range						
	kW	kW	kW		m³/h	m	m³/day	m³/h		m		m³/day		
JN3-SP60-1	2.2	2.2	2.80	7*1	60	6.0	484	40	~	70	8.5	4	298	670
JN3-SP60-2-2	3.0	3.0	4.00	10*1 #		10.5	369				15.5	6.5	218	550
JN3-SP60-2	4.0	4.0	5.20	14*1		12.5	433				19	9	249	556
JN3-SP60-3	5.5	5.5	6.40	16*1 #		20.0	387				29	14	238	510
JN3-SP60-4	7.5	7.5	11.20	14*2		29.0	350				40	21	221	446
JN3-SP60-5	9.2	11.0	15.60	13*3		37.0	353				51	28	223	431
JN3-SP60-6	11.0	11.0	16.80	14*3		45.0	339				62	34	214	414
JN3-SP60-7	13.0	15.0 #	18.00	15*3		53.0	329				73	39	208	412
JN3-SP60-8-2	13.0	15.0 #	18.00	15*3		56.0	328				78	41	205	414
JN3-SP60-8	15.0	15.0	22.40	14*4		61.0	333				84	45	211	417
JN3-SP60-9-2	15.0	15.0	22.40	14*4		64.0	333				89	47	208	418
JN3-SP60-9	18.5	18.5	28.00	14*5		69.0	368				96	52	231	451
JN3-SP60-10	18.5	18.5	30.00	15*5		77.0	345				106	58	219	423
JN3-SP60-11	22.0	22.0	33.60	14*6		85.0	358				117	64	227	439
JN3-SP60-12	22.0	22.0	33.60	14*6		93.0	328				127	70	209	402
JN3-SP60-13	22.0	22.0	33.60	14*6		100.0	319				139	75	200	393
JN3-SP60-14	25.0	30.0 #	33.60	14*6		106.0	319				149	80	198	391
JN3-SP60-15	25.0	30.0 #	33.60	14*6		114.0	312				159	85	195	386
JN3-SP60-16	30.0	30.0	39.20	14*7		122.0	339				170	91	212	419
JN3-SP60-17	30.0	30.0	42.00	15*7		130.0	318				181	98	199	390
JN3-SP60-18	30.0	30.0	42.00	15*7		140.0	311				194	105	196	383
JN3-SP60-19	37.0	37.0	50.40	14*9	148.0	342	204	112	216	417				
JN3-SP60-20	37.0	37.0	50.40	14*9	155.0	326	214	118	206	395				
JN3-SP60-21	37.0	37.0	54.00	15*9	163.0	326	226	123	205	399				

◆ Daily water requirement: 280~570 m³ (#:not optimal configuration)

System Model	Pump	Inverter	Solar Panels	Array	Rated Flow	Rated Head	Rated Daily water Output	Daily Water Output Range								
	kW	kW	kW		m³/h	m	m³/day	m³/h		m		m³/day				
JN3-SP75-1	4.0	4.0	5.20	14*1	75	12.0	463	50	~	95	15.5	9	323	~	563	
JN3-SP75-2	7.5	7.5	11.20	14*2		25.0	417				32	19	293		500	
JN3-SP75-3	11.0	11.0	16.80	14*3		38.0	411				49	29	287		492	
JN3-SP75-4	15.0	15.0	22.40	14*4		52.0	401				66.5	40	282		475	
JN3-SP75-5	18.5	18.5	28.00	14*5		65.0	401				83	51	282		466	
JN3-SP75-6	22.0	22.0	33.60	14*6		79.0	396				100	62	281		460	
JN3-SP75-7	30.0	30.0	39.20	14*7		93.0	456				118	73	324		530	
JN3-SP75-8	30.0	30.0	42.00	15*7		107.0	417				135	85	298		479	
JN3-SP75-9	37.0	37.0	50.40	14*9		121.0	428				152	96	307		493	
JN3-SP75-10	37.0	37.0	54.00	15*9		135.0	404				169	~	107		291	465
JN3-SP75-11	45.0	45.0	61.60	14*11		148.0	422				185	~	118		304	483
JN3-SP75-12	45.0	45.0	66.00	15*11		162.0	407				202	~	129		294	467
JN3-SP75-13	55.0	55.0	78.40	14*14		175.0	434				220	~	139		311	498
JN3-SP75-14	55.0	55.0	78.40	14*14		188.0	404				238	~	149		287	465
JN3-SP75-15	55.0	55.0	84.00	15*14		201.0	399				256	~	159		282	460
JN3-SP75-16	63.0	75.0 [#]	95.20	14*17		215.0	395				274	~	169		279	458
JN3-SP75-17	63.0	75.0 [#]	95.20	14*17		229.0	391				292	~	179		276	456
JN3-SP75-18	75.0	75.0	106.40	14*19		243.0	427				309	~	190		302	498
JN3-SP75-19	75.0	75.0	106.40	14*19		257.0	403				327	~	201		285	471
JN3-SP75-20	75.0	75.0	114.00	15*19		271.0	403				345	~	212		285	470

100

- ◆ Drive power-matched single/ 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 data 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
- ◆ Input of the utility grid/DG and photovoltaic, automatic switching, online energy complementary, photovoltaic priority, keep the pump rated work, and achieve 24H water supply.

The image contains two wiring diagrams. The top diagram is for a 'Low voltage 220V-240V' pump. It shows four terminals: JN, P, 2K2, and L. JN is connected to the pump inverter. P is connected to the pump inverter. 2K2 is connected to the pump inverter. L is connected to the pump inverter. The bottom diagram is for a 'High voltage 380V-460V' pump. It shows four terminals: JN, P, 22K, and H. JN is connected to the pump inverter. P is connected to the pump inverter. 22K is connected to the pump inverter. H is connected to the pump inverter.

Low voltage 220V-240V

- power:2.2kW
- pump inverter
- Intech

High voltage 380V-460V

- power:22kW
- pump inverter
- Intech



75kW~132kW

Professional new energy **products & solutions** provider with 10 years of experience

0.55kW~4kW

[illegible]

Hybrid solar pump inverter

2.2kW~7.5kW



Model	JNP2K2H-V5	JNP3KH-V5	JNP3K7H-V5	JNP4KH-V5	JNP5K5H-V5	JNP7K5H-V5
PV Input						
D.C. Max. Input Voltage	880V					
Recommended MPPT Voltage	460~850V					
D.C. Max. Input Current	15A	15A	15A	15A	30A	30A
Max. MPPT Efficiency	>99%					
Number of String	1					
A.C. Input						
Voltage	360~460Vac (3PH)					
Frequency	50Hz/60Hz(±3%)					
A.C. Output						
Max. Motor Output Power	2.2kW	3kW	3.7kW	4kW	5.5kW	7.5kW
Rated Output Voltage	380~460Vac (3PH)					
Output Frequency Range	0~50/60Hz					
Rated Output Current	6A	7A	9A	10A	13A	18A
System						
Protection Level	IP65					
Operating Temperature	-25~60℃					
Cooling Way	Nature cooling					
Display	LED/LCD					
Communication	RS485/GPRS/Bluetooth					
Altitude	3000m, above3000m need derate operating					
Noise Emission	<50dB					
Compliance	EN 50178; IEC/EN 62109-1;IEC61800					
Dimension（W/H/D）	265/330/150(mm)					
Weight	6.5kg					

Hybrid solar pump inverter

11kW~18.5kW



Model	JNP11KH-V5		JNP15KH-V5		JNP18K5H-V5	
PV Input						
D.C. Max. Input Voltage	880V					
Recommended MPPT Voltage	460~850V					
D.C. Max. Input Current	24.4A		33.3A		41.1A	
Max. MPPT Efficiency	>99%					
Number of String	1					
A.C. Input						
Voltage	360~460Vac (3PH)					
Frequency	50Hz/60Hz(±3%)					
A.C. Output						
Max. Motor Output Power	11kW		15kW		18.5kW	
Rated Output Voltage	380~460Vac (3PH)					
Output Frequency Range	0~50/60Hz					
Rated Output Current	21A		29A		36A	
System						
Protection Level	IP65					
Operating Temperature	-25~60℃					
Cooling Way	Force cooling					
Display	LED/LCD					
Communication	RS485/GPRS					
Altitude	3000m, above3000m need derate operating					
Noise Emission	<50dB					
Compliance	EN 50178; IEC/EN 62109-1;IEC61800					
Dimension（W/H/D）	325/445/165(mm)					
Weight	13kg					

Hybrid solar pump inverter

22kW~55kW



Model	JNP22KH-V5	JNP30KH-V5	JNP37KH-V5	JNP45KH-V5	JNP55KH-V5
PV Input					
D.C. Max. Input Voltage	880V				
Recommended MPPT Voltage	460~850V				
D.C. Max. Input Current	49A	67A	82A	100A	122A
Max. MPPT Efficiency	>99%				
Number of String	1				
A.C. Input					
Voltage	360~460Vac (3PH)				
Frequency	50Hz/60Hz(±3%)				
A.C. Output					
Max. Motor Output Power	22kW	30kW	37kW	45kW	55kW
Rated Output Voltage	360~460Vac (3PH)				
Output Frequency Range	0~50/60Hz				
Max.Output Current	42A	57A	71A	86A	104A
System					
Protection Level	IP65				
Operating Temperature	-25~60 ℃				
Cooling Way	Nature cooling				
Display	LED/LCD				
Communication	RS485/GPRS				
Altitude	3000m, above3000m need derate operating				
Noise Emission	<50dB				
Compliance	EN 50178; IEC/EN 62109-1;IEC61800				
Dimension (W/H/D)	460/715/260(mm)				
Weight	35kg				

Solar pump inverter

75kW~132kW



Model	JNP75KH	JNP90KH	JNP110KH	JNP132KH
PV Input				
D.C. Max. Input Voltage	880V			
Recommended MPPT Voltage	460~850V			
D.C. Max. Input Current	166A	205A	251A	287A
Max. MPPT Efficiency	>99%			
Number of String	2			
A.C. Output				
Max. Motor Output Power	75kW	90kW	110kW	132kW
Rated Output Voltage	380~460Vac (3PH)			
Output Frequency Range	0~50/60Hz			
Rated Output Current	142A	171A	209A	251A
System				
Protection Level	IP21			
Operating Temperature	-25~50 ℃			
Cooling Way	Force cooling			
Display	LCD			
Communication	RS485/GPRS			
Altitude	3000m, above3000m need derate operating			
Noise Emission	<70dB			
Compliance	EN 50178; IEC/EN 62109-1;IEC61800			
Dimension (W/H/D)	654/1210/465(mm)			
Weight	190kg	220kg	220kg	220kg

Solar pump inverter

370W~550W single phase



Project reference

JNTECH team started solar pump inverter research, development, products since 2010. JNTECH is always paying attention to customer’s requirements, focusing on quality of solar pump inverters and doing best service for customer. After 10 years effort, JNTECH wined customers and partner’s trust, reputation. JNTECH solar pump inverters have been using in more than 50 countries until now. Especially ,JNTECH products passed the test from Government engineer, NGO, UNDP, UNHCR,UNICEF,OCHA,ICRC in Asia, Africa and Middle East. JNTECH product’s parameters and features are used in solar pump system tenders in these countries. More and more JNTECH solar pump inverters are using in their tenders. Each person from JNTECH team is working hard to reward customer’s trust and reputation. JNTECH is constantly making effort on the way for making the world greener.

Model	JNP370L	JNP370LS	JNP550L	JNP550LS
PV Input				
D.C. Max. Input Voltage	110V	110V	160V	160V
Recommended MPPT Voltage	55~110V	55~110V	80~160V	80~160V
D.C. Max. Input Current	12A	12A	10A	10A
Max. MPPT Efficiency	>99%			
Number of String	1			
A.C. Output				
Max. Motor Output Power	370W	370W	550W	550W
Rated Output Voltage	220/230Vac (3PH)	220/230Vac(1PH)	220/230Vac (3PH)	220/230Vac(1PH)
Output Frequency Range	0~50/60Hz			
Rated Output Current	2A	2A	3A	3A
System				
Protection Level	IP65			
Operating Temperature	-25~60 ℃			
Cooling Way	Natural cooling			
Display	LED			
Altitude	3000m, above3000m need derate operating			
Noise Emission	<40dB			
Compliance	EN 50178; IEC/EN 62109-1			
Dimension （W/H/D）	200/300/80(mm)			
Weight	3.4kg			



Project reference



37kW solar pump 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 pump 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 pum 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.



Project reference

45kW solar pump 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 pump 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.



Project reference



System: 3kw System for NGO
Application: Agriculture Irrigation
Location: Pakistan



System: 37kw solar pump system
Application: Agriculture Irrigation
Location: Multan, Pakistan
Head: 75m



System: 22kw system
Application: Agriculture Irrigation
Location: Gilgit Baltistan Province, Pakistan
Head: 160feet



System: 3.7kw System
Application: Agriculture Irrigation
Location: Cambodia



System: 400kw System
Location: Sichuan, China



System: 3.7kw solar pump system
Location: Cambodia



System: 2.2KW System
Application: Agriculture Irrigation



System: 4KW Solar Pump System

Project reference



Solution System: 2.2kw System (JNP2K2L)
Application: Livestock Drinking Water
location: Algeria



System Solution: 13 set 1.1-7.5kw System (UNDP project)
Application: Drinking & Irrigation
Location: Sudan



System Solution: 5.5kw System (JNP5K5H)
Application: Plant Irrigation
Location: Taourirt, Morocco



Solution System: 12.2kwSystem
(1set 1.5 system; 1set 2.2kw system; 1set 3kw system; 1set 5.5kw system)
location: South Africa



Solution System: 55kw Solar Pump System
Application: Daily Water Supply & Irrigation
Location: Sudan



System Solution: 2.2kw Solar Pump System
Application: Farming & Drinking Water
Location: Sudan

Project reference



Solution System: 110kw System
Application: Irrigation
Location: Guerrero, Mexico



Solution System: 18.5kw System (JNP18K5H)
Application: Irrigation
Location: Guerrero, Mexico



System Solution: 18.5kw system
Application: Agriculture Irrigation
Location: Colombia



System Solution: 22kw system
Application: Agriculture Irrigation
Location: Colombia



Solution System: 7.5kw System (JNP7K5H)
Application: Farm Irrigation
Location: Queensland, Australia



Project reference



System Solution: 75kw system
NICEF-Operate Solar Pumping System for
Tlwmos Well – Sadah.
Location: Yemen



System Solution: 15kw System (JNP15KH)
Application: Agriculture Irrigation
Location: Hadhramaut, Yemen



System: 1.1kW solar aeration system
Location: Hefei



System: 1.1kW & solar aeration system
Location: Hefei



System: 2 sets 750W solar aeration system
Location: Shenzhen

