



Solar Pump Inverter

CATALOG

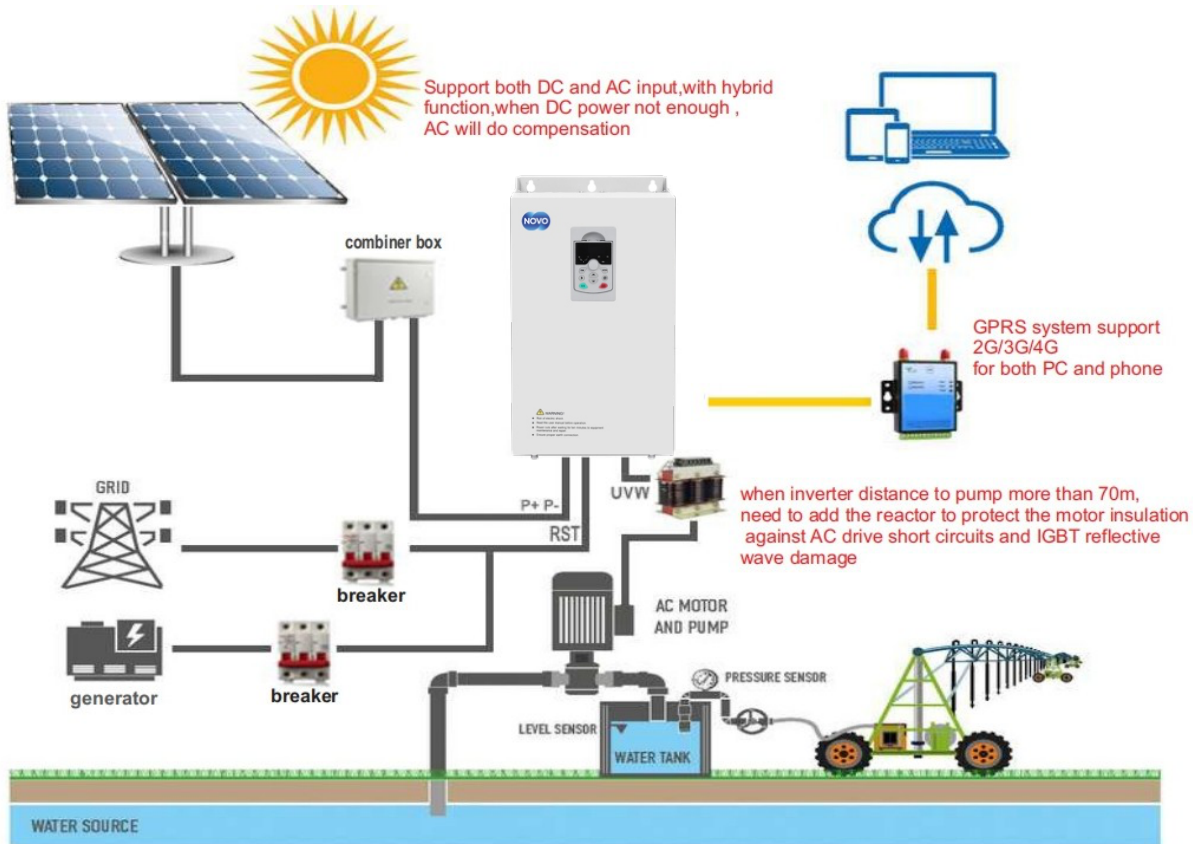


EI WAHA SERVICES WELLS AND PUMPS

www.elwahapumps.com

Model Reference

Maximizing pump delivery with Dual supply Solar pump drive



Generic specifications



	400 V Motor	220 V Motor
Maximum input voltage (Voc)	900 VDC	800 VDC
Minimum input voltage	400 VDC	180 VDC
Recommended voltage DC (VMPP)	550 - 620 VDC	280-750 VDC
Nominal input voltage AC	3ph 380 - 480 V, 50/60 Hz	3ph 200 - 240 V, 50/60 Hz
Nominal output voltage AC	3ph 400 V	3ph 200 V
Output frequency	0 - 400 Hz	
Efficiency(inverter)	> 99%	
Ambient temperature range	-10 to 50° C	
Cooling	Natural / by means of internal fan	
Recommended input power	1.2 times the pump capacity (minimum)	
Warranty	2 years	
Output reactor	optional (same power as inverter power, for distance over 70 m)	

Model Power Range

MAX500-PV solar pump inverter is a suitable, economic and flexible solution for water pumping station. Governmental program or non governmental organization, local entrepreneurship or local association may use the solar pumping solution for autonomous application.

MAX500-PV is the unique solar drive compatible with most of local suppliers for motors and solar panels.

Easy to connect and reliable, MAX500-PV will fit non specialist expectations

Model	Related Power	Recommond MPPT Voltage	Output Current	Adaptable Motor			Product Photo
	(KW)	(VDC)	(A)	Voltage	KW	HP	
MAX500-PV-10R7	0.75	300V-750V	7A	220V	0.75	1	
MAX500-PV-11R5	1.5	300V-750V	9A	220V	1.5	2	
MAX500-PV-1002	2.2	300V-750V	14A	220V	2.2	3	
MAX500-PV-1004	4	300V-750V	23A	220V	3.7	5	
MAX500-PV-1005	5.5	300V-750V	32A	220V	5.5	7.5	
MAX500-PV-1007	7.5	300V-750V	45A	220V	7.5	10	
MAX500-PV-21R5	1.5	300V-750V	9A	220V	1.5	2	
MAX500-PV-2002	2.2	300V-750V	13A	220V	2.2	3	
MAX500-PV-2004	4	300V-750V	17A	220V	3.7	5	
MAX500-PV-2005	5.5	300V-750V	25A	220V	5.5	7.5	
MAX500-PV-2007	7.5	300V-750V	32A	220V	7.5	10	
MAX500-PV-40R7	0.75	300V-750V	3.8A	400V	0.75	1	
MAX500-PV-41R5	1.5	540V-850V	4.2A	400V	1.5	2	
MAX500-PV-4002	2.2	540V-850V	5.6A	400V	2.2	3	
MAX500-PV-4004	4	540V-850V	9.5A	400V	3.7	5	
MAX500-PV-4005	5.5	540V-850V	14A	400V	5.5	7.5	
MAX500-PV-4007	7.5	540V-850V	18A	400V	7.5	10	
MAX500-PV-4011	11	540V-850V	25A	400V	11	15	
MAX500-PV-4015	15	540V-850V	32A	400V	15	20	
MAX500-PV-4018	18.5	540V-850V	38A	400V	18.5	25	
MAX500-PV-4022	22	540V-850V	45A	400V	22	30	
MAX500-PV-4030	30	540V-850V	60A	400V	30	40	
MAX500-PV-4037	37	540V-850V	75A	400V	37	50	
MAX500-PV-4045	45	540V-850V	90A	400V	45	60	
MAX500-PV-4055	55	540V-850V	110A	400V	55	75	
MAX500-PV-4075	75	540V-850V	150A	400V	75	100	
MAX500-PV-4090	90	540V-850V	176A	400V	90	125	
MAX500-PV-4110	110	540V-850V	210A	400V	110	150	
MAX500-PV-4132	132	540V-850V	250A	400V	132	175	
MAX500-PV-4160	160	540V-850V	300A	400V	160	210	
MAX500-PV-4185	185	540V-850V	340A	400V	185	250	
MAX500-PV-4200	200	540V-850V	380A	400V	200	260	
MAX500-PV-4220	220	540V-850V	420A	400V	220	300	
MAX500-PV-4250	250	540V-850V	470A	400V	250	350	

* MAX500-PV can do customized power up to 630KW ,for more details of bigger power solar pump inverters ,please check with related person.



Why Solar Pumping?

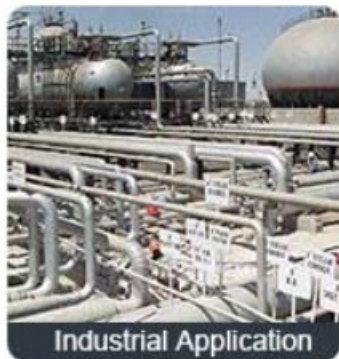
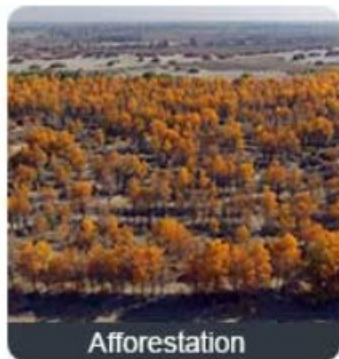
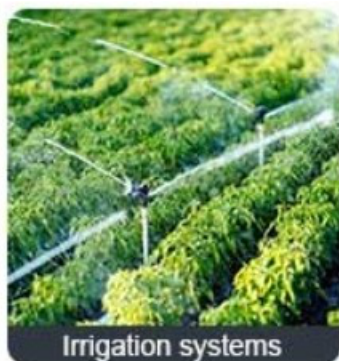
- Your "off-grid" solution for irrigation and potable water extraction
- It represents significant savings, the cost are fixed and known
- No diesel and butane gas needed
- Renewable energy supply
- High reliability and long lifespan
- Functions quietly and automatically
- Wide capacity range
- Simple installation and easy to start up
- Low maintenance
- Environment friendly water supply solution - no fume pollution



Advantages of Solar Pumping

- True and outstanding MPPT function
(Maximum Power Point Tracking)
- Start criteria by system conditions and time
- Stop criteria selectable
- Dry pump detection function
- Low power function
- Detection of sudden changes of conditions
(especially irradiance)
- Two sets of PID gains, for a fast and smooth operation
- Water tank level control
- Grid connection selectable for maintenance and backup system
- It allows to control different kind of pumps

Application of Solar Pumping



Optional input & output reactor

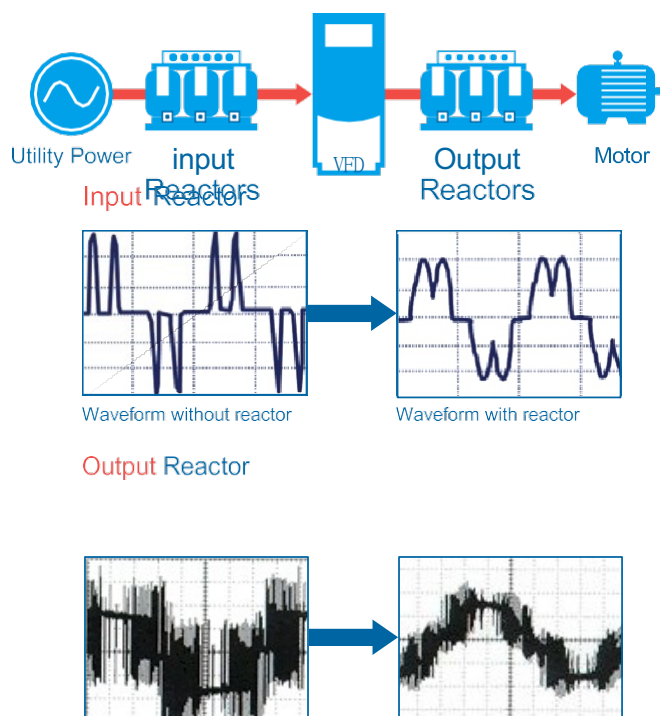
What benefit the output reactor bring to you?

1. Suitable for reactive power compensation and harmonic control;
2. The main function of the output reactor is to compensate for the influence of long-line distributed capacitance and suppress the output harmonic current;
3. Effectively protect the frequency converter and improve the power factor, which can prevent the power from the grid. The interference of the rectifier unit reduces the pollution of the power grid caused by the harmonic current.



Performance Specifications

Impedance Levels	1.5%, 3% and 5%
Continuous Service Factor	Reactors rated 1 to 750 Amps – 150% of rating Reactors rated above 750 Amps – 125% of rating
Overload Rating	200% of rated for 30 minutes 300% of rated for 1 minute
Input Voltage Range	208V – 690V
Current Range	1A – 1,500A
Temperature Rise	135°C
Ambient Temperature	-40°C to 50°C
Fundamental Frequency Inductance Curve	100% at 100% Current 50/60 Hz 100% at 150% Current 50% at 350% Current



380V AC output reactor (2% impedance) selection table

Type	Power (Kw)	Inductance Value (mH)	Current (A)	Weight (Kg)	Dimension 尺寸(mm)								Connection		Linear aperture	Pic. NO.
					D(Max)	D1±1	D2±2	W±10	W1±1	W2±2	H (Max)	A*B	Terminal	Cu flat		
OCL-0010-CL/4-2	3.7	1.4	10	1.5	100	35	80	/	59	77	125	7x12	✓		/	A
OCL-0015-AL/4-2	5.5	0.93	15	2.5	150	70	120	/	72	92	150	7x12	✓		/	A
OCL-0020-AL/4-2	7.5	0.70	20	2.5	150	70	120	/	72	92	150	7x12	✓		/	A
OCL-0030-AL/4-2	11	0.47	30	3.5	180	70	145	/	68	88	170	7x12	✓		/	A
OCL-0040-AL/4-2	15	0.35	40	5	180	70	145	/	81	101	170	7x12	✓		/	A
OCL-0050-AL/4-2	18.5	0.28	50	5	180	70	145	130	81	101	135	7x12	✓		/	B
OCL-0060-AL/4-2	22	0.24	60	6.5	180	70	145	140	90	110	145	7x12	✓		/	B
OCL-0080-AL/4-2	30	0.17	80	9	210	80	170	155	91	111	160	7x12	✓		/	B
OCL-0090-AL/4-2	37	0.16	90	9	210	80	170	155	91	111	160	7x12	✓		/	B
OCL-0120-AL/4-2	45	0.12	120	13	245	80	200	160	94	130	210	12x20		30*3	φ11	C
OCL-0150-AL/4-2	55	0.095	150	15	245	80	200	160	94	130	210	12x20		30*3	φ11	C
OCL-0200-AL/4-2	75	0.07	200	20	245	80	200	185	120	156	210	12x20		30*3	φ11	C
OCL-0240-AB/4-2	90	0.056	240	25	240	180	200	195	132	162	220	11x20		30*7	φ11	D
OCL-0250-AB/4-2	110	0.056	250	25	240	180	200	195	132	162	220	11x20		30*7	φ11	D
OCL-0290-AB/4-2	132	0.048	290	31	310	225	250	215	122	158	255	12x20		40*8	φ13	E
OCL-0330-AB/4-2	160	0.042	330	32	310	225	250	215	122	158	255	12x20		40*8	φ13	E
OCL-0390-AB/4-2	187	0.036	390	42	310	225	250	220	125	161	285	12x20		40*8	φ13	E
OCL-0490-AB/4-2	220	0.028	490	45	310	225	250	220	125	161	285	12x20		40*8	φ13	E

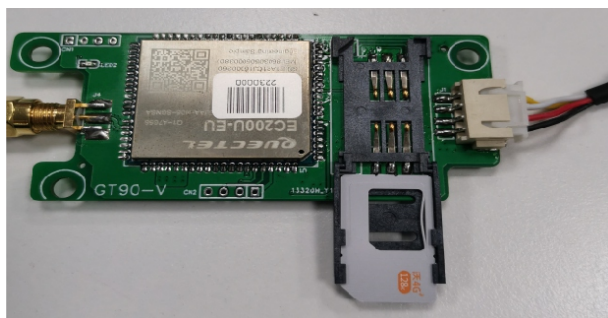
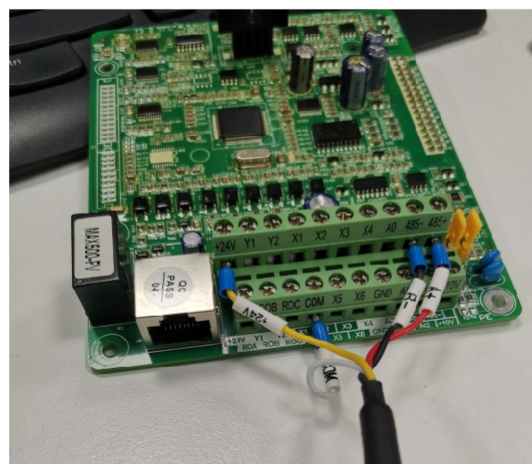
Optional GPRS monitoring device

- Novo's solar pump inverter GPRS system is a professional monitoring system platform managing solar pumping system.
- It supplies water volume monitoring and operation of inverter from anywhere at anytime.
- It's convenient to visit real time and historical data via web or IOS & Android APP anytime and anywhere.
- This easy-to-use platform makes monitoring of solar pump systems simple and convenient, far reducing operate time and monitoring costs as well.



Installation and terminal connection

Terminal	Drive	GPRS module
Power terminal	24V +	24V +
	COM	COM
Communication terminal	485+	A+
	485-	R-



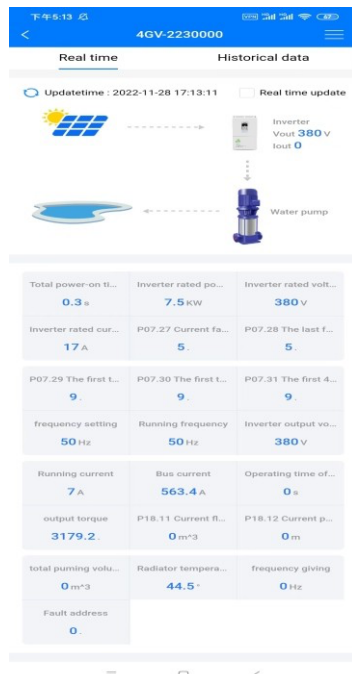
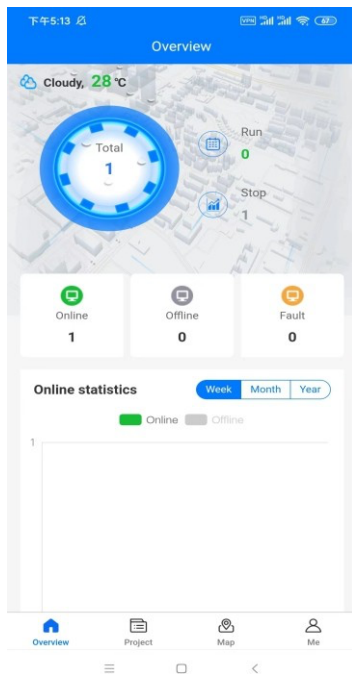
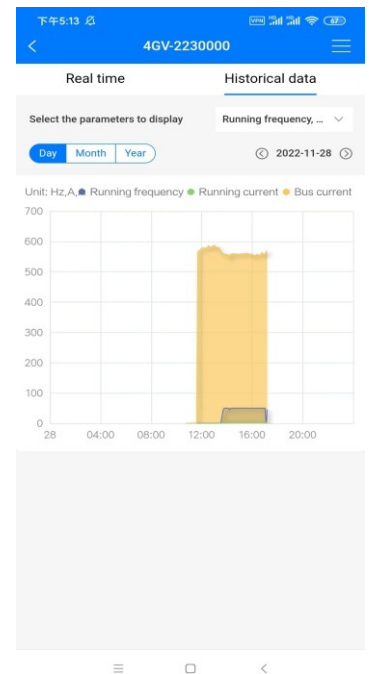
GPRS operation

 Iphone
 Ipad
 Android devices

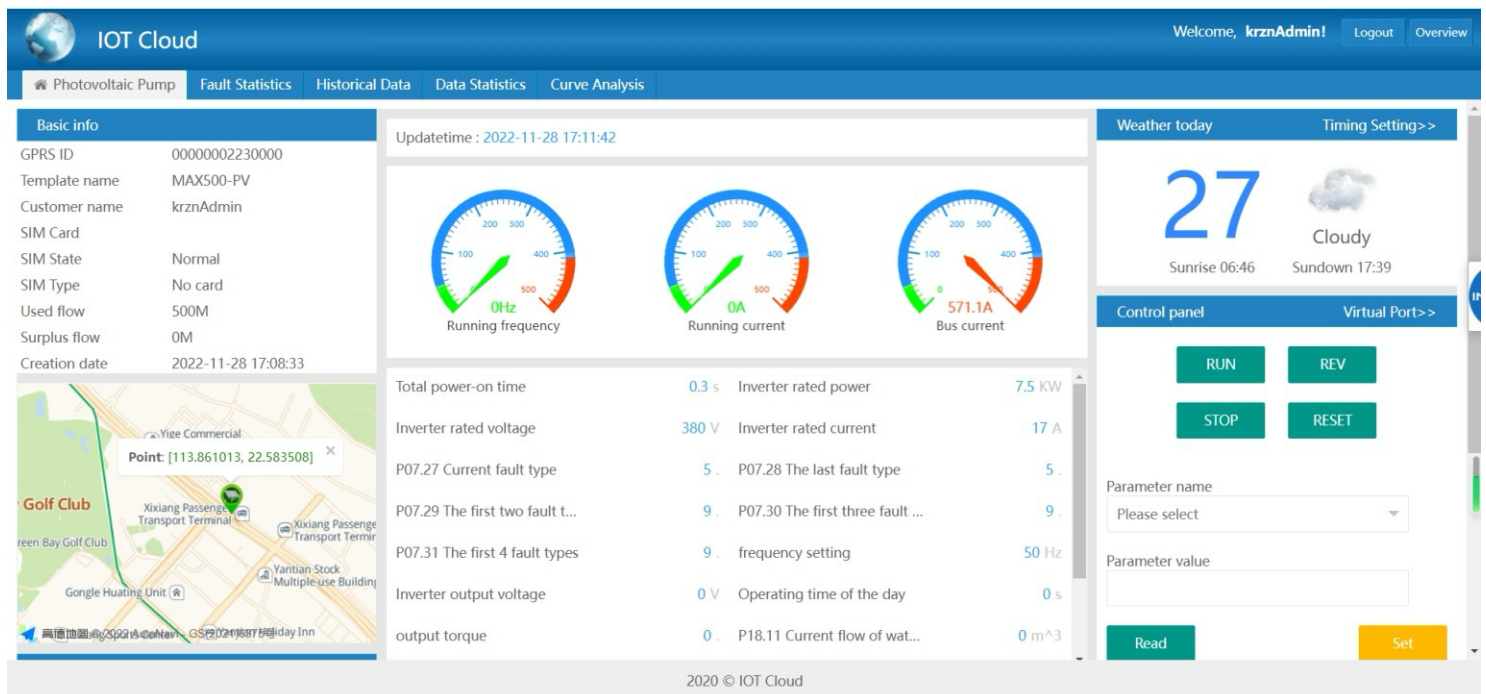


**monitor and operate at
anytime, from anywhere**

Remote control and monitor from mobile phone side

Remote control and monitor from PC side





Contact Us:

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