



SOLAR PUMPING INVERTER

A NEW GENERATION CONTROLLER



Intelenerti Global Private Limited

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DURASOL[®]
Energi

COMPANY PROFILE

VISION

To be the most trusted & accepted global brand in fluids transfer products using best technology & people with due care of society. To be a company that constantly strives for quality and customer satisfaction by providing more valued, efficient products and offering the best pumping solutions with global benchmarks.

MISSION

To work relentlessly to achieve our vision statement by understanding the exact customer's needs, offering best working environment, latest equipment and training to our employees with strong focusing on integrity and ethics. To empower the workforce to offer products and services that exceeds customer expectations. To excel with an emphasis on cost competitiveness, on time delivery of products & services, best business and ethical practices with strong organizational values justifying the interests of all stakeholders.

COMPANY PROFILE

Brief introduction



Professional R&D team

20+

Over 20 years of professional management experience

Intelenergi Global Pvt Ltd. is a globally recognized manufacturer of high performance "ETG" Grid pumps, Solar Hybrid Pumps and Pump Controllers. The ETG pumps are available in a wide range of solar & grid and ideally suited for drinking water, flood irrigation, drip irrigation, sprinkler systems, live-stock watering, aquiculture projects, salt pan farming and urban water supply.

Our modern manufacturing facility is spread over an area of 15000 sq. mtr and has a capacity to manufacture over 750 motors and pumps per day with key operations like winding, magnet assembly, magnetization, impregnation, assembly and testing being carried out in-house. The assurance of ISO9001 quality systems allows us to achieve consistent quality, production flexibility and control over process variability. We also have design and engineering capabilities to reconfigure our pumps or develop customized pumps for variety of applications as per customer requirements.



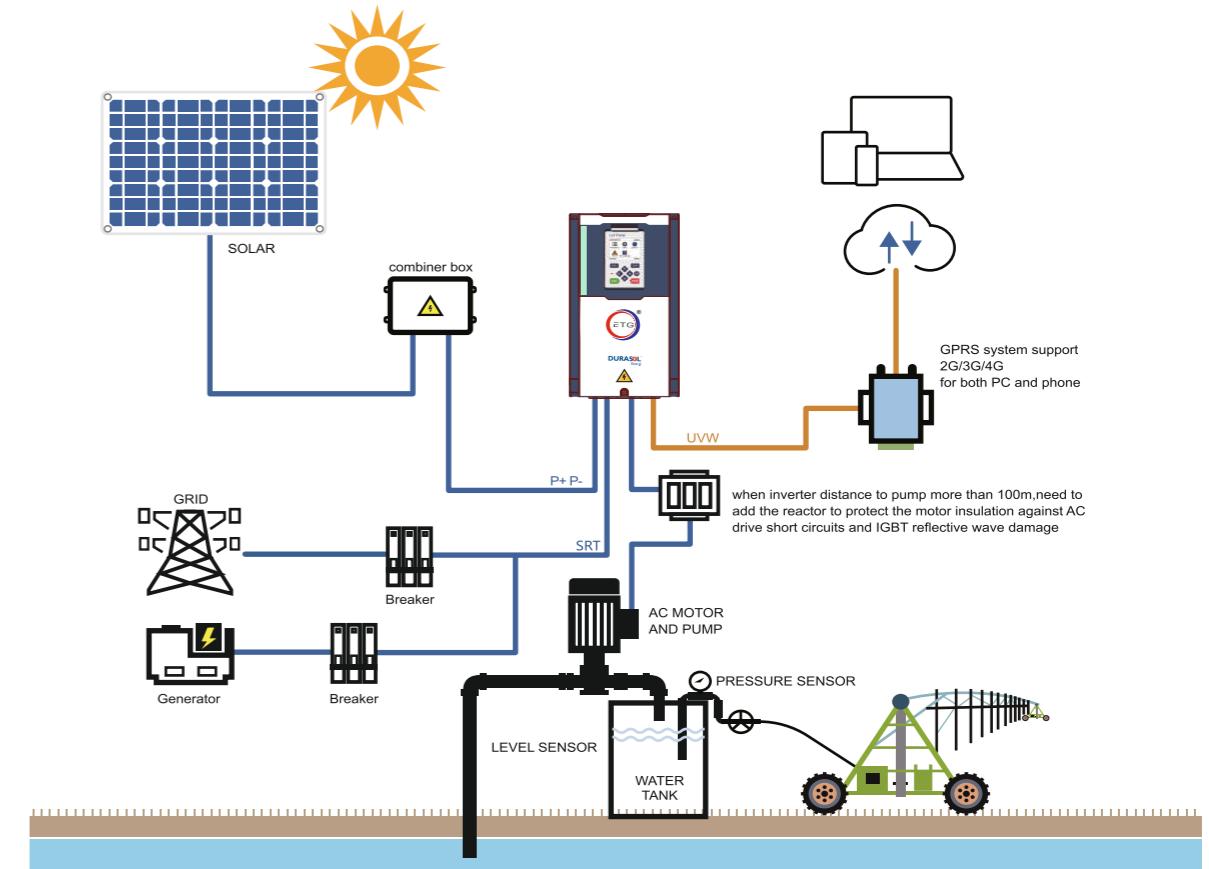
VFD500-PV Solar Pumping Inverter



Solar pump inverter working principle



Model reference



Electrical Specifications

	220V	380V
Max input DC voltage(VOC)	450V	800V
DC voltage range	200-450V	350V-800V
Recommended DC input voltage range(Vmpp)	250V-400V	450V-600V
Recommended input operation voltage	305V(Vmpp)	530V(Vmpp)
MPPT efficiency	>99%	
Rated output voltage	1/3-phase 220VAC	3-phase 380V-480V VAC
Output frequency range	50/60Hz(maximum 600hz)	
Max efficiency of the machine		99%
Ambient temperature range	-10 °C-50 °C, derating if the temperature is above 40 °C	
Cooling method	Air cooling	
Protection degree	IP20/P21	
Altitude	Below 1000m; above 1% for every additional 100m.	
Standard	IEC CE	

Model Range

Drive Model	Related Voltage	Max DC input voltage (V)	Rated output current (A)	Applicable water pump (kW)	SIZE
VFD500-20T00400-PV	220V	450	17	4	SIZE A
VFD500-40T00550-PV	380V	800	13	5.5	SIZE B
VFD500-40T00750-PV	380V	800	17	7.5	SIZE B
VFD500-40T01100-PV	380V	800	25	11	SIZE C
VFD500-40T03000-PV	380V	800	60	30	SIZE E
VFD500-40T22000-PV	380V	800	426	220	SIZE K

Product size

SIZE	Appearance and installation dimension mm							
	A	B	H	H1	W	D	Φd	Mounting screws
SIZE A	87	206.5	215	/	100	170	ø5.0	M4X16
SIZE B	113	239.5	250	/	130	180	ø5.0	M4X16
SIZE C	153	299	310	/	170	193	ø6.0	M5X16
SIZE E	218	438	452.5	424	260	230	ø7.0	M6X16
SIZE K	360	795	816	762	490	358	ø11.0	M10X25

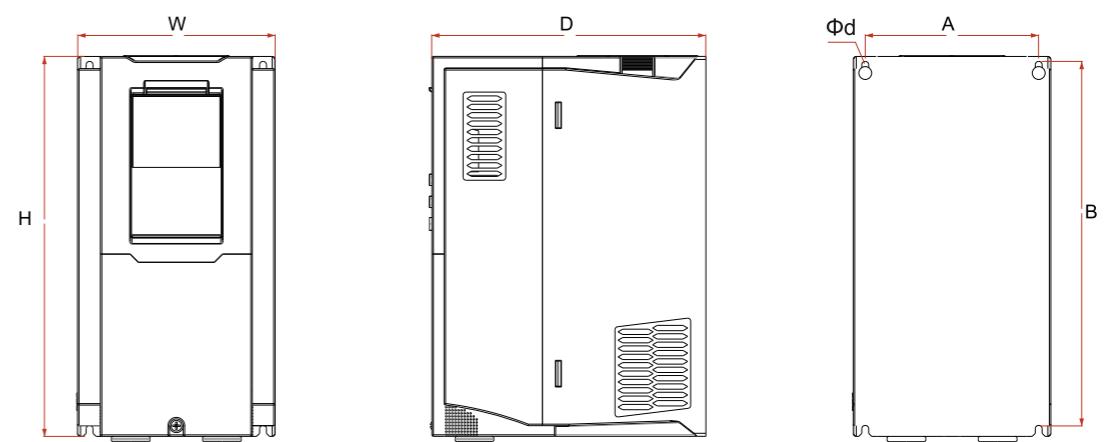


LED & LCD keypad

1. Standard inverter are with LED keypad,LCD keypad is optional.
2. LCD keypad can monitor 4 parameters at the same time. LED keypad show one parameter only.
3. LCD keypad with detailed parameter explain,no need use user manual ,more user friendly.
4. LCD keypad with copy and update and download function.widely used for government projects and big farms.
5. New version LCD and LED display for more options. New LCD with time clock. Multiple language and quick search etc. More user friendly.



Appearance and Mounting Hole Dimension



Application scenarios



Commercial/Agricultural irrigation system



Agricultural and animal husbandry water supply system



Barren hills governance system

Key features

- Maximizing power generation efficiency of solar modules with the use of advanced MPPT control technology and automatic MPPT voltage tracking
- Adjust water outflow of pumps quickly on basis of sunlight intensity change
- Automatic hibernation and wake up
 - (1) Hibernate at high water level and wake up at low water lever
 - (2) Hibernate at sunrise and sunset and wake up at strong sunlight
- Built-in C3 EMC filter and DSP technology and Infineon PIM design, with functions of light weak protection, dry run and low voltage, full water warning, overvoltage and over temperature protection
- Advanced calculation for Pump flow and LCD monitoring display
- Automatic running without any commissioning in keypad control and GPRS monitoring option
- Dual supply capability with change over switch-solar and grid compatible
- Special MPPT+PID function for better and more stable water supply



Agricultural greenhouse water supply system



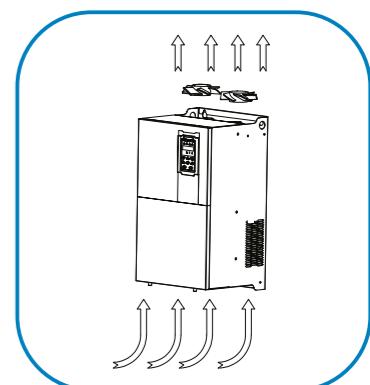
Landscape fountain system



Solve water short problem

Independent duct design

- ▶ Independent air duct design, effectively preventing dust entering into inverter, causing short-circuit and other faults and improving reliability
- ▶ Use bigger air volume and long-life cooling fan effectively reduces the internal temperature rise of the inverter and ensures reliable and stable operation of inverter.



Perfect protection system

- ▶ Designed for 10 years of maintenance free operation.
- ▶ Cooling fan, capacitors, relays, and IGBTs have been carefully selected and designed for a life expectancy up to ten years.

* Assumes the drive is running continuously for 24 hours a day at 80% load with an ambient temperature of 40



COMPANY QUALIFICATIONS



OUR COMPLETE RANGE OF ENERGY SOLUTIONS

(Products other than Inverter, Solar PCU and batteries are under ETG brand)

