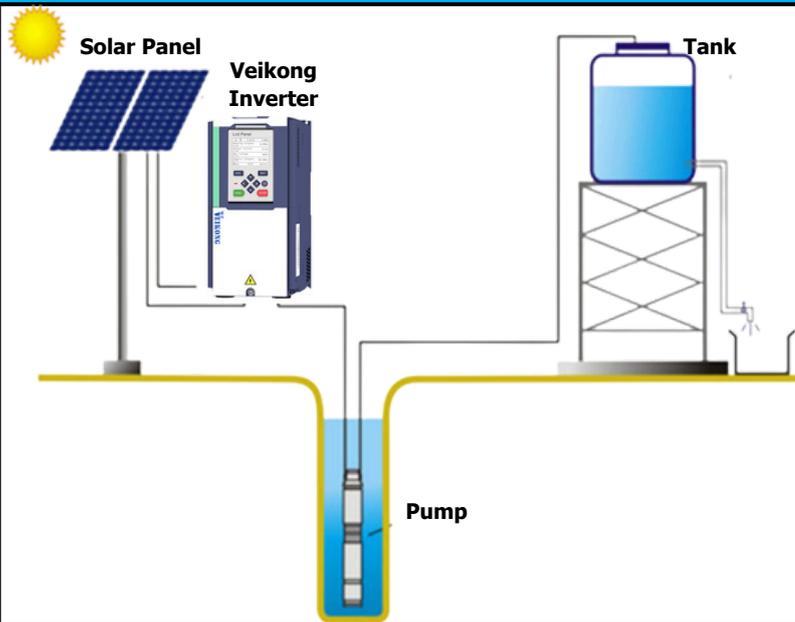


# Veikong

## AC Solar Pump Controllers



**Veikong** are AC/DC inverters specially designed for solar-powering of AC motors in various water pumping applications in irrigation, community water supply, fish farming, and agriculture. As a leading solar pump inverter manufacturer, Veikong provides drives equipped with solar-specific and pump control functions, including maximum power point tracking (MPPT), dry run detection, and flow evaluation. It is adaptable to all AC motor types and can be retro fitted to existing AC supply installations in solarisation projects.

The **Veikong** Solar Pumping Inverter is a specialized device designed to optimize the performance of solar-powered water pumping systems.

### Key features include:

- **Hybrid Power Blending capability:** Dual supply capability with inbuilt solar and grid compatibility.
- **High Efficiency:** Integrated advanced MPPT control technology ensures optimal operation of the solar panels, maximizing energy harvesting throughout varying sunlight conditions.
- **Wide Voltage Range:** Supports a broad input voltage range, allowing for compatibility with various solar panel configurations.
- **Automatic Control:** Includes automatic start/stop functions, water level detection, and protection features to prevent dry running, overload, and overheating.
- **LCD Display:** Advanced calculation for Pump flow and LCD monitoring display for upto 4 parameters at a go.
- **Remote Monitoring and Control:** With additional GPRS remote control, it offers remote monitoring and control capabilities via mobile apps or cloud platforms, providing real-time data and diagnostics.
- **Robust Design:** Built to withstand harsh environmental conditions, with protection against dust, water, and other external factors.
- **Automatic hibernation and wake up:** Hibernate at high water level and wake up at low water level, Hibernate at sunrise and sunset and wake up at strong sunlight

### SITE DETAILS

**VEIKONG** controllers are surface mounted and should be provided with a housing for water and heat protection. They must also be provided with a circuit breaker between the PV modules and controller. Due to the high operating voltages proper earthing is essential, which must be done by a qualified electrician. As a rule, all PV powered solar pumping systems should be provided with a solar module array with a nominal output of 1.3 times the motor size. Solar arrays should be wired in a combination of series and parallel connections to ensure that the correct voltage is available into the inverter without exceeding the allowed maximum voltage. It is important that the connection arrangement is approved by the pump supplier.

### SPECIFICATIONS

Model Number	Applicable Motor Rated Power	Rated Voltage	Max DC input Voltage	Rated Current (A)	Voltage Working Range, VDC	MPP Voltage Solar, VDC	Height mm	Width mm	Depth, mm
VFD500-20T00220-PV LCD	2.2	1x220v	450	10.6	160-450	250-400	215	100	170
VFD500-40T00220-PV LCD	2.2	3x380v	800	6	250-800	450-600			
VFD500-40T00400-PV LCD	4		800	9.4	250-800	450-600			
VFD500-40T00550-PV LCD	5.5		800	13	250-800	450-600			
VFD500-40T00750-PV LCD	7.5		800	17	250-800	450-600	250	130	180
VFD500-40T01100-PV LCD	11		800	25	250-800	450-600	370	170	193
VFD500-40T01500-PV LCD	15		800	32	250-800	450-600			
VFD500-40T01800-PV LCD	18		800	37	250-800	450-600	370	210	196
VFD500-40T02200-PV LCD	22	800	45	250-800	450-600				

### OPERATING CONDITIONS

**Ambient Temperature:** -20 to 50 Degrees Celcius

**Relative Humidity:** 0-95% (non-condensing)

**Altitude:** below 1000m, Derate 1% for every 100m rise

**Frequency:** from 0-60 Degrees Celsius