

VEICHI

SI32 Series Solar Pumping Inverter



VEICHI

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Official Website

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Stock Code: 688698

IP65 for SI32 Series

Secured waterproof design for durable and reliable operation.
Outdoor application with AC and DC input for continuous operation.



IP65

Max. power up to 22kW

A wide range of motor types compatible up to 6,500rpm for high-efficiency operation.



22kW

Anti-reverse connection and anti-backflow

Enhanced the system security for lower potential risks due to improper operation or unforeseen circumstances.



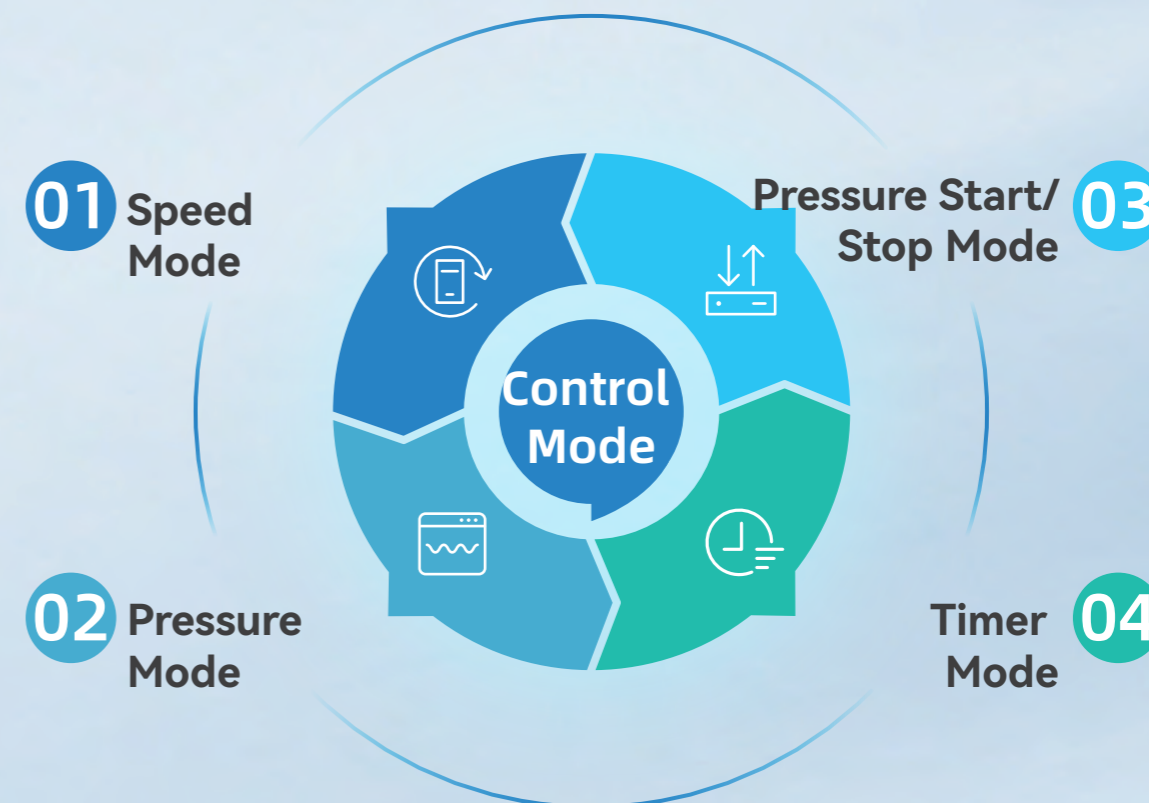
2 Key Functions



4 flexible control modes integrated for constant pressure operation

Easily set F22.03 [Application Macro]=3 for speed mode, pressure mode, pressure start/stop mode, and timer mode.

Among them, the speed in the speed mode and time mode is decided by the speed parameters while the speed of pressure mode is regulated by PID control.



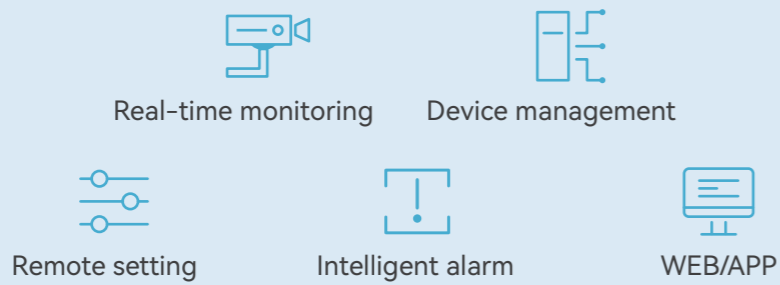
PID Disconnection Detection

Robust Safety Guarantee in Pressure Mode and Pressure Start-Stop Mode

With reference to the alarm threshold setting, the system is able to ensure pressure control accuracy while responding to potential faults and hazardous situations, improving overall efficiency and safety.

IOT platform

4G remote control with visual monitoring

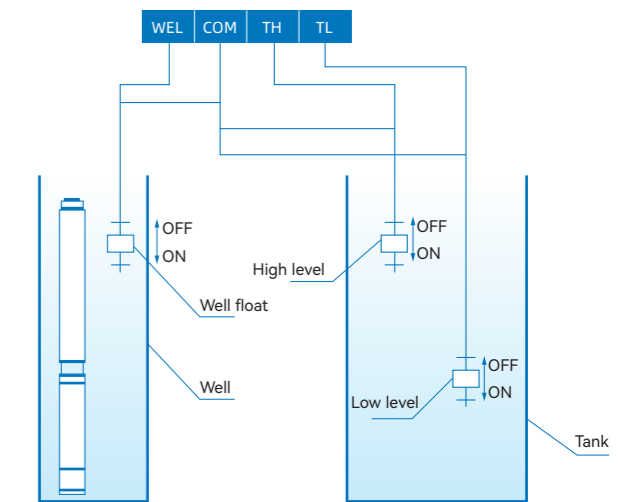


Multiple pressure sensors

Built-in common sensor types and ranges are free to be changed by users.

Real-time monitoring and control of water levels in wells and cisterns by float switches

The float switch triggers a signal to start the pump when the cistern drops to a certain level, and stops it when the water level reaches the upper limit, thus maintaining the water in a reasonable range, and at the same time, it can prevent the pump from idling work when there is less or no water at all in the well.



Mark	Name	Description
TH	High float	TH connects to one end of the switch and COM connects to the other. When the switch is on, the motor stops and the system enters the high water level protection. When the switch is off, it exits the high water level protection.
TL	Low float	TL connects to one end of the switch and COM connects to the other. When the switch is on, the system will jump to the low water level and start the motor immediately. When the switch is off, it exits the low water level status.
WEL	Water shortage	WEL connects to one end of the switch and COM connects to the other. When the switch is on, the motor stops and the system enters the water shortage protection. When the switch is off, it exits the water shortage protection.

MPPT efficiency up to 99.8%

Maximize the efficient capture and conversion of solar energy with minimal energy loss

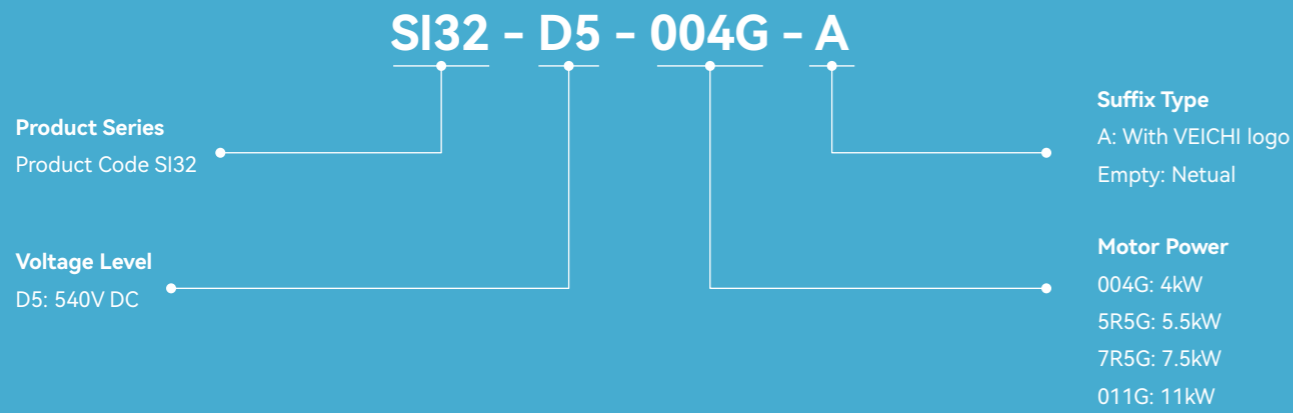


Solar power brings people closer to nature, making life better!

Application:

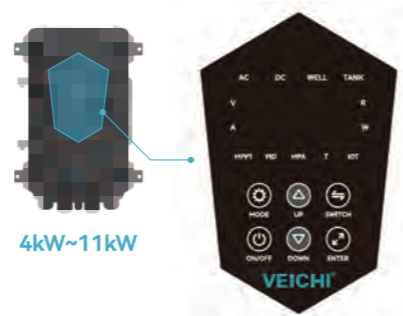


Naming Rules:

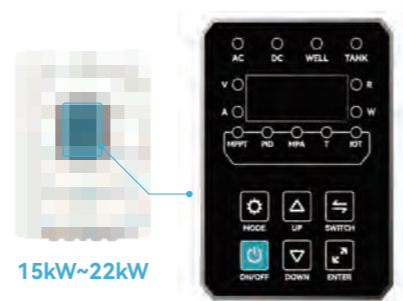


Model and Appearance:

Model	Rated Power (kW)	DC Input (V)	AC Input (V)	Rated Output Current (A)
SI32-D5-004G-A	4	250~850	380~480	10
SI32-D5-5R5G-A	5.5	250~850	380~480	13
SI32-D5-7R5G-A	7.5	250~850	380~480	17
SI32-D5-011G-A	11	250~850	380~480	25




Model	Rated Power (kW)	DC Input (V)	AC Input (V)	Rated Output Current (A)
SI32-D5-015G-A	15	250~850	380~480	32
SI32-D5-018G-A	18.5	250~850	380~480	38
SI32-D5-022G-A	22	250~850	380~480	45



Technical Specifications:

Input	
DC voltage	250~850V DC
Sugg. voltage	620~750V DC
Max. MPPT efficiency	≥99.9%
AC voltage/frequency	3PH 380~480V 50/60Hz
Allowable fluctuation	-15%~10%, voltage imbalance rate: < 3%; frequency: ±5%
Output	
Output voltage	Output under rated conditions: three-phase, 0~input voltage (converted to AC values), deviation < 5%
Output frequency	0.00Hz~600.00Hz
Output frequency accuracy	±0.5% of the max. frequency
Control Performance	
Motor type	Asynchronous motor, synchronous motor, and synchronous reluctance motor
Control mode	V/F control, SVC, FVC, V-F split control
Modulation	SVPWM
Carrier frequency	1.0kHz~16.0kHz
Overload capacity	150% of rated load for 60s, 180% of rated load for 10s and 200% of rated load for 0.5s under 4kHz
Display and Keys	
Digital tube	Built-in panel for parameter display
Key function	Single and combined presses against accidental operation
Environment	
Installation method	Wall-mounting
Protection level	IP65
Working environment	Install them in the places without oil, dust, corrosive,flammable and explosive gases in the air, vibration,condensation, icing, rain, snow, hail, etc.,
Ambient temperature and humidity	-10°C~+50°C, derate above 40°C, 60°C max. (no-load) 5%RH~95%RH (non-condensation)
Altitude	<1000 meters,derate by 1% for every 100 meters rise above 1000m
Vibration	5.9M/s ² (0.6G) under 9Hz~200Hz.
Storage temperature	-30°C~+60°C
Protection	
General	Under-voltage, over-voltage, i/o phase loss, overload, over-current, over-heat, phase-to-phase short-circuit, short-circuit to ground, stall and auto-tuning failure
PV-dedicated	Low-frequency, pump over-current, dry-out, min. power protection, overflow, and sleep protection
Constant pressure	PID disconnection detection

Main Circuit Terminal

Type	Mark	Name
Input	R, S, T	Three-phase 380V power input terminals
	-, +	DC bus positive and negative input terminals
Output	U, V, W	Drive output terminal
Ground		Grounding terminal

Control Circuit Terminal

Type	Mark	Name	Description
Power	+10V GND	+10V	Provide +10V power supply to the external devices, with maximum output current of 50mA; generally used as the power supply for external potentiometer with the resistance range of 1kΩ~5kΩ
	+24V GND	+24V	Provide +24V power supply to the external devices; generally used as the power supply for DI and DO terminals and external sensors. Max. output current: 100mA
AI	AI	Encoder signal input	Range: DC 0V~10V(0mA~20mA)
DI	TH	X1	Opto-isolator, compatible with bipolar input 1. Input impedance: 4.4KΩ 2. Voltage at high-level input: 10V~30V 3. Voltage at low-level input: 0V~5V
	TL	X2	
	WELL	X3	
	X4	X4	
Communication	A+	485 communication terminal A	For 485 communication
	B-	485 communication terminal B	

Service and Support

