VEICHI

VPS01 Series
Hybrid Microgrid Inverter

Product Highlights

Load Adaptability and Operating Modes

- 100% three-phase unbalanced load capacity for stable operation under complex conditions
- Intelligent load rate regulation for optimized diesel generator load distribution and enhanced fuel efficiency
- Multi-mode operation (VF/PQ/VSG/constant bus) with multi-unit parallel compatibility
- On/off-grid/emergency power support with high/low voltage ride-through and black start

Control and Protection Capacity

- Customizable control strategies for scenario-specific performance
- ARM+FPGA dual-core architecture for high-speed, precision control with superior dynamic response
- Multi-layer current protection: drive protection against hardware overcurrent, CBC, overload, and overcurrent for various industrial needs
- Grid-tied charging/discharging and off-grid standalone inverter functions available

Integrated and Scalable Design

- Seamless switching between PV-MPPT, isolation transformer integrated in a compact design for unified maintenance
- Flexible PV expansion support for adaptable system scalability

Intelligent O&M Management

- Remote monitoring and OTA upgrades for reduced on-site maintenance and higher efficiency

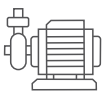
Technical Specifications

Model	VPS01-0200-GE0A	VPS01-0300-GE0A	VPS01-0500-GE0A	VPS01-0800-GE0A	VPS01-1000-GE0A
AC Power(off-grid)					
Max. output power/kW	220	330	550	880	1100
Rated power (kW)	200	300	500	800	1000
Rated voltage (V)	400	400	400	400	400
Rated current (A)	289	433	722	1155	1444
THDi	<3% (Linear balanced load)				
Rated frequency (Hz)	50/60Hz				
Overload capacity	110% for non-stop operation				
PV Input					
Max. PV voltage/V	900				
Max. PV power	120kW per MPPT	120kW per MPPT	120kW per MPPT	120kW per MPPT	120kW per MPPT
PV input channel	1	1	1	1	1
MPPT qty	2/3	3	5/6	8	10/11
Isc/A	240A				
Max. discharge current/A	200A				
MPPT voltage range/V	250V-850V				
Battery					
Max. charge power/kW	240/360	360	600/720	960	1200/1320
Battery voltage range/V	630V~900V				
Type	Li-ion battery				
System Configuration					
Dimension[W/D/H]/mm	1450*900*2082	1450*900*2082	643*728*2082+ 1994*1103*2082		
Net(kg)	1350	1850	3150		
Environment temperature/℃	-10℃~50℃; (Derate by 1% for every 1℃ rise when above 40℃, 50℃ max)				
Relative humidity	0% ~ 95%, no condensation				
Protection level	IP21				
Noise/dB	<70				
Altitude/m	4000 max (Derate by 1% for every 100m increase when above 1000m)				
Standby power consumption	<0.5% of rated power				
Cooling	Air cooling				
Display and Communication					
Display	LCD touch screen				
BMS communication	RS485, CAN				
Local communication	RS485, TCP/IP				

Applications

Off-grid Mining Sites

Off-grid Islands


Off-grid Pumping Stations

Nomadic Farms

Unelectrified Villages

Ports

Industrial Plants