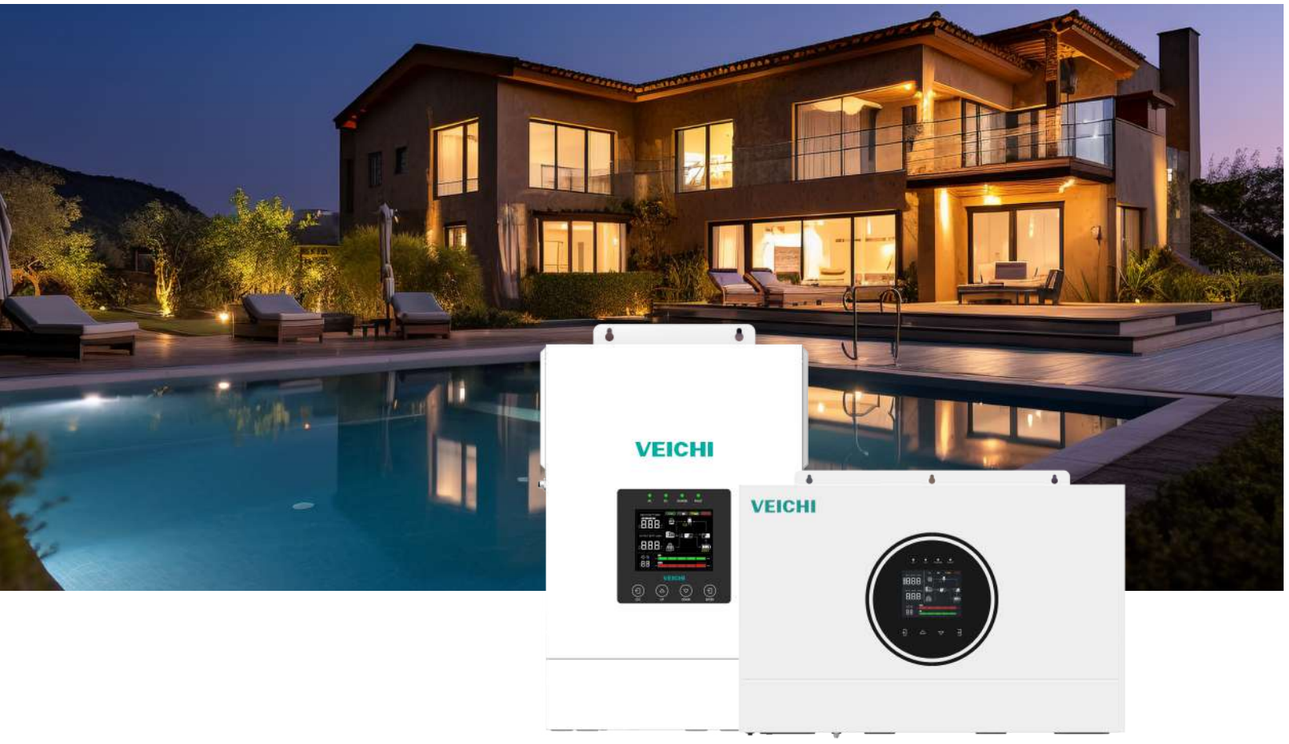
SV-(4/6)K-S1
SV-12K-S
MPPT Solar Inverter



Product Highlights

- Two-year warranty, generating more power throughout its life cycle
- Supports up to 1.3 times photovoltaic power input
- 10-milli second ultra-fast switching
- Built-in WiFi, connects to the VEICHI cloud platform
- Dual output design, extending critical load usage time
- Built-in diesel generator interface, no ATS required, smarter generator switching

Model	SV-4K-S1	SV-6K-S1	SV-12K-S
Input (PV DC)			
Max. PV array power(Wp)	7200	10800	24000
Maximum input power	4400	7800	18000
Number of MPPTs	1	1	2
Number of MPPT input strings	1	1	2
Rated PV input voltage(V)	500	550	500
PV input voltage range(V)	90~450	90~500	90~450
MPPT voltage range(V)	90~450	90~500	90~450
Start-up voltage(V)	120	120	120
Max. PV input current per MPPT(A)	18	27	30
Max. PV short-circuit current input per MPPT(A)	23	32	44
Battery			
Compatible battery type	Lead-acid & Lithium-ion	Lead-acid & Lithium-ion	Lead-acid & Lithium-ion
Communication protocol type	RS485/CAN	RS485/CAN	RS485/CAN
Rated battery voltage(V)	24	48	48
Battery voltage range(V)	20~30	42~60	42~60
Max. charge current(A)	120	120	250
Max. discharge current(A)	137	137	280
Active Battery	Yes	Yes	Yes
Grid			
Rated AC voltage(V)	230V AC	230V AC	230V AC
AC Voltage range	90~280V AC	90~280V AC	90~280V AC
Rated AC frequency(Hz)	50/60	50/60	50/60
Rated AC output current(A)	18.1	28.2	52.1
Rated AC output power(W)	4000	6000	12000
THDv	<3%	<3%	<3%
Max. continuous AC passthrough current(A)	35	35	Grid 70A/Generator 60A
UPS			
Rated output power(W)	4000	6000	12000
Rated output voltage(V)	230	230	230
Rated output current(A)	18	27	52.1
Rated output frequency(Hz)	50/60	50/60	50/60
Peak power and peak time	2 time peak power，5s	2 time peak power，5s	2 time peak power，5s
Switching time(ms)	4	4	4
Dual Output	YES	YES	YES
Efficiency			
Max. MPPT effciency	99%	99%	99%
Peak Efficiency (PV to INV)	94%	94%	94%
Protection & function			
PV Reversed Protection	YES		
Over current/voltage protection	YES		
AC Short-circuit current protection	YES		
Grid monitoring	YES		
AC Surge protection	YES		
DC Surge protection	YES		
Battery reverse polarity protection	YES		
PV reverse polarity protection	YES		
Power sales monitoring	YES		
General			
Ingress protection rating	IP21	IP21	IP21
Operating environment temperature range(℃)	-10~50		
Derating temperature(℃)	45		
Storage temperature range(℃)	-15~60		
Relative humidity	5%~95%		
Display & Communication interface	LED, RS485/Wi-Fi/CAN/USB		
Warranty	2 years		
Cooling method	Smart fan cooling		
Topology	Transformer-less		
Altitude(m)	<4000		
Noise emission(typical)(dB)	50		
Parallel Capacity(PCS)	/	9	9
Dimension (W*H*D)(mm)	390*525*125		625*400*120
Weight(kg)	9.3	10.3	20
Standards & Certification			
Certification	IEC 62109-1, IEC 61000, IEC61683		

VLS-(6/8/10/12)K-H1

Low Voltage Single-Phase Hybrid Inverter



Application Scenarios

Platform Capacity Expansion / Urban Households / Villa & Luxury Residence Users / Areas with Unstable Grid Power

Product Highlights

Flexible Adaptability

10-unit parallel, On/Off-grid, Generator input integrated, 28A high current PV input

High Performance

160% PV oversizing, 200% EPS peak power (60s), 220A high-current charge/discharge, 80V low start-up voltage

Safe and Secure

Battery terminal temperature monitoring, IP65 protection, Type II AC/DC SPDs, optional AFCI protection

Efficient Management

Smart load management via cloud platform & LCD screen, UPS-level switchover < 10ms (single unit)

Model	VLS-6K-H1	VLS-8K-H1	VLS-10K-H1	VLS-12K-H1
PV Input				
Recommended Max.input power(kW)	9.6	12.8	16	19.2
Start-up voltage(V)	80			
Max.DC input voltage*(V)	510			
Rated DC input voltage(V)	360			
MPPT voltage range*(V)	90 ~ 425			
No.of MPP trackers	2			
No.of DC inputs per MPPT	1 + 1	2 + 2		
Max.input current(A)	18 + 18	28 + 28		
Max.short-circuit current(A)	27 + 27	42 + 42		
Battery Side				
Battery type	Lead acid / Li-ion			
Battery voltage range(V)	40 ~ 60			
Maximum charging/discharge current(A)	135	190	200	210
List of compatible batteries	VEICHI, GreenCN, BYD, Deye, WECO, ect.			
Grid Side				
Rated output power(kW)	6	8	10	12
Max.output apparent power(kVA)	6.6	8.8	11	12
Max.input apparent power(kVA)	6.6	8.8	11	12
Max.charging power of battery(kW)	6	8	10	12
Rated AC voltage	220 / 230 Vac, L / N / PE			
Rated AC frequency(Hz)	50/60			
Max.output current(A)	28.7	38.3	43.5	52.2
Power factor	-0.8 lagging ~ 0.8 leading			
Max.total harmonic distortion	< 3% (of nominal power)			
Back-up Side				
Rated output power(kW)	6	8	10	12
Max.output current(A)	28.7	38.3	43.5	52.2
UPS switching time(ms)	< 10			
Rated output voltage	220 / 230 Vac, L / N / PE			
Rated output frequency(Hz)	50/60			
Voltage harmonic distortion	< 3% (of nominal power)			
Efficiency				
Max.efficiency(%)	96			
European efficiency(%)	96.5			
Protection				
Integration	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault Current Monitoring, Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection DC Input Switch, DC Terminal Insulation Impedance Monitoring, Residual Current Detection (RCD), Surge Protection Level Rapid Shutdown, RSD			
Over voltage category	PV:II Main:III			
General Data				
Dimensions [W×H×D(mm)]	411×631×236		411*631*238	
Weight(kg)	28.6		30	
Protection degree	IP65			
Topology	Transformerless for PV Side / HF for Battery Side			
Operating Temperature Range(℃)	-25 ~ +60(>45 derating)			
Relative Humidity(%)	5 ~ 95 (condensing)			
Operating Altitude(m)	< 3000			
Cooling	Smart redundant fan cooling			
Noise Level(dB)	<45			
Display	LED+LCD			
Communication	LED + LCD / CAN, RS485, CT, NTC, WiFi / (4G, LAN Optional)			
Safety Certification	IEC 62109, IEC 61000			
Grid Connection Certification	EN 50549-1/10, IEC 61683, IEC 61727, IEC62116			

VLT-(10/12/15)K-H1

Low Voltage Three-Phase Hybrid Inverter



Application Scenarios

Platform Capacity Expansion / Villas & Luxury Residences /
Large Self-Built Homes / Small Farms / Integrated
Solar-Storage-Charging Compact Charging Stations

Product Highlights

Flexible Adaptability

10-unit parallel, On/Off-grid, Generator input integrated,
30A high current PV input

High Performance

160% PV oversizing, 110% AC output, 200% EPS peak power (10s),
290A high-current charge/discharge, 80V low start-up voltage

Safe and Secure

Battery terminal temperature monitoring, IP65 protection,
Type II AC/DC SPDs, optional AFCI protection

Efficient Management

Smart load management via cloud platform & LCD screen,
UPS-level switchover < 6 ms (single unit)

Model	VLT-10K-H1	VLT-12K-H1	VLT-15K-H1
PV Input			
Recommended Max.input power(kW)	16	19.2	24
Start-up voltage(V)	160		
Max.DC input voltage(V)	800		
Rated DC input voltage(V)	550		
MPPT voltage range(V)	200 ~ 700		
No.of MPP trackers	2		
No.of DC inputs per MPPT	2 + 2		
Max.input current(A)	30 + 30		
Max.short-circuit current(A)	36 + 36		
Battery Side			
Battery type	Lead-acid or Lithium-ion		
Battery voltage range(V)	40 ~ 60		
Maximum charging/discharge current(A)	220	250	290
List of compatible batteries	VEICHI, GreenCN, BYD, Deye, WECO, ect.		
Grid Side			
Rated output power(kW)	10	12	15
Max.output apparent power(kVA)	11	13.2	16.5
Max.input apparent power(kVA)	11	13.2	16.5
Max.charging power of battery(kW)	10	12	15
Rated AC voltage	220 / 380 , 230 / 400， 3 L / N / PE		
Rated AC frequency(Hz)	50/60		
Max.output current(A)	15.9	19.2	24
Power factor	-0.8 lagging ~ 0.8 leading		
Max.total harmonic distortion	< 3% (of nominal power)		
Back-up Side			
Rated output power(kW)	10	12	15
Max.output current(A)	15.9	19.2	24
UPS switching time(ms)	< 6		
Rated output voltage	220 / 380 , 230 / 400 , 3 L / N / PE		
Rated output frequency(Hz)	50/60		
Voltage harmonic distortion	< 3% (of nominal power)		
Efficiency			
Max.efficiency(%)	97.6		
European efficiency(%)	96.5		
Protection			
Integration	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, AC Output Overvoltage Protection AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault, Current Monitoring, Arc Fault Circuit Interrupter, Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, DC Terminal Insulation Impedance Monitoring, Residual Current Detection(RCD), Rapid Shutdown, RSD(Optional)		
Over voltage category	PV:II Main:III		
General Data			
Dimensions [W×H×D(mm)]	440×660×282 (Excluding Connectors and Brackets)		
Weight(kg)	≤38.5		
Protection degree	IP65		
Topology	Transformerless for PV Side / HF for Battery Side		
Operating Temperature Range(℃)	-25 ~ +60(>45 derating)		
Relative Humidity(%)	5 ~ 95 (No condensation)		
Operating Altitude(m)	< 3000		
Cooling	Intelligent Redundant Fan Cooling		
Noise Level(dB)	≤ 55		
Display	LED+LCD		
Communication	RS485/CAN/WIFI / (4G, LAN Optional)		
Safety Certification	IEC 62109, IEC 61000		
Grid Connection Certification	EN 50549-1/10, IEC 61683, IEC 61727, IEC62116		

VCLB-5K/16K-E01

Low-Voltage Lithium Battery



Product Highlights

Flexible Expansion

Up to 15 units in parallel,
respond flexibly to demand

Easy Installation

Wall-mounted or floor-standing installation,
aesthetically pleasing

Performance

Maximum charge/discharge current
100A, rapid recharging

Convenient Control

Built-in 4.3-inch capacitive touchscreen
displaying all battery status information

Safety

Built-in aerosol fire suppression system;
IP20 ingress protection

Long-term Reliability

LFP battery,6000+ charge/discharge cycles,
SOH no less than 80%;5-year warranty,
10-year warranty optional

Model	VCLB-5K-E01	VCLB-16K-E01
General Specification		
Nominal voltage(Vdc)	51.2	
Nominal capacity(Ah)	100	314
Battery energy(Wh)	5120	16076
Charge voltage	57.6	
Discharge voltage(V)	44.8	
Recommended charge/discharge current（A）	70A(0.7C)	157A(0.5C)
Maximum charge/discharge current（A）	70A(0.7C)	220A(0.7C)
Peak charge/discharge current(A)	100A(1C)	314A(1C)
Nominal charge/discharge power(W)	5120	16076
DOD	95%	95%
Communication		
Display	SOC status indicator, LED indicator	
Communication	RS485, CAN	
General Specification		
Dimension[W/D/H](mm)	380x190x610	460×240×820
Battery net weight(Approx.)(kg)	44.5	122.25
Installation	Floor-standing or wall-mounted	
Charging temp. range(℃)	0~55	
Discharge temp. range(℃)	-20~55	
Operating/storage humidity	≤95%RH	
Max. operating altitude	≤3000m	
IP rating	IP20	
Wi-Fi module	Built-in Wi-Fi module, APP	
Cell technology	LiFePO4 (Lithium Iron Phosphate)	
Cooling method	Forced air cooling	
Fire protection system	/	Aerosol Fire Extinguishing
Cycle life	6000 Cycles @ 80% DOD/25℃/0.5C, 60%EOL	
Scalability	Max. 15 batteries in parallel	
Usage environment	Indoor	
Standard Compliance		
Certification	CE , MSDS , UN 38.3	

VCLB-5K/10K-W01

Low-Voltage Lithium Battery



Product Highlights

Flexible Expansion

Up to 20 units in parallel,
5.12kWh--204.8kWh capacity

Certificates

UN38.3, MSDS, CE, EMC

Long-term Reliability

LFP battery, 6000+ charge/discharge cycles,
SOH no less than 80%; 5-year warranty,
10-year warranty optional

Easy Installation

Wall-mounted or floor-standing installation,
aesthetically pleasing and space-saving

Convenient Control

Touchscreen displaying all battery information;
quick switching communication protocols

Safety

Built-in aerosol fire suppression system;
IP65 ingress protection

Model	VCLB-5K-W01	VCLB-10K-W01
General Specification		
Nominal voltage(Vdc)	51.2	
Rated capacity(Ah)	100	200
Energy(Wh)	5120	10240
Battery impedance(mΩ)	≤50	
Charging cut-off voltage(V)	56.16	
Discharge cut-off voltage(V)	44.8	
Recommend charge current	0.5C 50A	0.5C 100A
Scalable	Up to 15 units	
Max charge current(A)	100	200
Max continue discharge current	100A,-20℃~60℃,≤65+20%RH	200A,-20℃~60℃,≤65+20%RH
Operating temperature range(℃)	-20~60	
Storage environment(50%state of harge)	20℃~45℃in three months;25±3℃overthree months; Humidity: ≤65±20%RH	
Environment	Outdoor/Indoor	
Installation	Wall mounted/Floor stand	
Cell technology	Lithium-iron phosphate(LiFeP04)	
Life cycle	6000 times @80%DOD	
Cooling	Natural convection	
Protection rating	IP65	
Certificates	IEC62619, UN38.3, MSDS, CE	
Dimension and Weight		
Dimension[W/D/H(mm)]	520×470×141.5	800×590×142
Battery net weight(Approx.)(kg)	47.2	96.5
Compatibility list	VEICHI, Deye, Growatt, Goodwe, Solis ,ect.	

VCLB-5K/16K-W02

Low-Voltage Lithium Battery



Product Highlights

Flexible Expansion

Up to 15 units in parallel,
respond flexibly to demand

Easy Installation

Wall-mounted or floor-standing installation,
aesthetically pleasing

Performance

Maximum charge/discharge current
100A, rapid recharging

Convenient Control

Built-in 4.3-inch capacitive touchscreen
displaying all battery status information

Safety

Built-in aerosol fire suppression system;
IP65 ingress protection

Long-term Reliability

LFP battery,6000+ charge/discharge cycles,
SOH no less than 80%;5-year warranty,
10-year warranty optional

Model	VCLB-5K-W02	VCLB-16K-W02
General Specification		
Nominal voltage(Vdc)	51.2	
Nominal capacity(Ah)	100	314
Battery energy(Wh)	5120	16076
Charge voltage	57.6	
Discharge voltage(V)	44.8	
Recommended charge/discharge current（A）	70A(0.7C)	157A(0.5C)
Maximum charge/discharge current（A）	70A(0.7C)	220A(0.7C)
Peak charge/discharge current(A)	100A(1C)	314A(1C)
Nominal charge/discharge power(W)	5120	16076
DOD	95%	95%
Communication		
Display	SOC status indicator, LED indicator	
Communication	RS485, CAN	
General Specification		
Dimension[W/D/H](mm)	380x190x610	460×240×820
Battery net weight(Approx.)(kg)	47.5	125
Installation	Floor-standing or wall-mounted	
Charging temp. range(℃)	0~55	
Discharge temp. range(℃)	-20~55	
Operating/storage humidity	≤95%RH	
Max. operating altitude	≤3000m	
IP rating	IP65	
Wi-Fi module	Built-in Wi-Fi module, APP	
Cell technology	LiFePO4 (Lithium Iron Phosphate)	
Cooling method	Forced air cooling	
Fire protection system	/	Aerosol Fire Extinguishing
Cycle life	6000 Cycles @ 80% DOD/25℃/0.5C, 60%EOL	
Scalability	Max. 15 batteries in parallel	
Usage environment	Indoor or outdoor	
Standard Compliance		
Certification	CE , MSDS , UN 38.3	

VHT-10/12K-25-H
VHT-10/12/15/20K-40-H
High Voltage Three-Phase Hybrid Inverter



Product Highlights

- 150%DC oversizing boosts solar capture
- Maximum 40A charging and discharging
- Wide 135-750V range fits diverse batteries
- 10ms up S-level switch secures supply
- 200% max backup @10s handles overloads
- IP65 protects both indoors and outdoors
  Silent 25dB operation for comfort

Model	VHT-10K-25-H	VHT-12K-25-H	VHT-10K-40-H	VHT-12K-40-H	VHT-15K-40-H	VHT-20K-40-H
PV Input						
Recommended Max.input power(kW)	15	18	15	18	22.5	30
Start-up voltage(V)	135					
Max.DC input voltage*(V)	1000					
Rated DC input voltage(V)	620					
MPPT voltage range*(V)	200 ~950					
No.of MPP trackers	2					
No.of DC inputs per MPPT	1 + 1		2 + 2			
Max.input current(A)	15/15		30 /30			
Max.short-circuit current(A)	20/20		40/40			
Battery Side						
Battery type	Lithium Battery					
Battery voltage range(V)	135 ~750					
Maximum charging/discharge current(A)	25		40			
List of compatible batteries	VEICHI, Deye, Goodwe, Must, SRNE, Felicity, etc. For more details, please visit veichi.com					
Grid Side						
Rated output power(kW)	10	12	10	12	15	20
Max.output apparent power(kVA)	11	13.2	11	13.2	16.5	22
Max.input apparent power(kVA)	16.5	16.5	20	24	30	30
Max.charging power of battery(kW)	10	12	10	12	15	20
Rated AC voltage	220/380, 230/400, 240/415, 3L/N/PE					
Rated AC frequency(Hz)	50/60					
Max.output current(A)	16.5	20	16.5	20	25	33.5
Power factor	-0.8 lagging ~ 0.8 leading					
Max.total harmonic distortion	< 3%					
Back-up Side						
Rated output power(kW)	10	12	10	12	15	20
Max.output apparent power(kVA)	11	13.2	11	13.2	16.5	22
Max.output current(A)	16.5	20	16.5	20	25	33.5
UPS switching time(ms)	< 10					
Rated output voltage	3L/N/PE; 220/380V; 230/400V; 240/415V					
Rated output frequency(Hz)	50/60					
Voltage harmonic distortion	< 3%					
Efficiency						
Max.efficiency(%)	98.2		98.4			
European efficiency(%)	97.4		97.5			
Protection						
Integration	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, AC Output Overvoltage Protection AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault, Current Monitoring, Arc Fault Circuit Interrupter, Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch					
Over voltage category	PV:II Main:III					
General Data						
Dimensions [W×H×D(mm)]	534 × 418 × 210					
Weight(kg)	26		28		31	
Protection degree	IP65					
Standby self-consumption	< 15					
Topology	Transformerless					
Operating Temperature Range(℃)	-30~60					
Relative Humidity(%)	0 ~ 100					
Operating Altitude(m)	3000 (>3000m derating)					
Cooling	Natural Convection		Smart fan			
Noise Level(dB)	<25		<40			
Display	LED+LCD					
Communication	RS485/CAN/WIFI /LAN					

VHT-(30/50)K-100-H

High Voltage Three-Phase Hybrid Inverter



Product Highlights

- 110% unbalanced output enhances self-consunption
- 100A charging/discharging for efficiency energy transfer
- Continuous 110% AC overloading sustains power
- Starts at 135V for more generation time
- Max.10 pcs parallel for on-grid operation and max.4 pcs parallel for off grid operation
- 120% max backup @60s handles overloads
- IP65 protects both indoors and outdoors
- Supports diesel generators for diverse energy sourcing

Model	VHT-30K-100-H	VHT-50K-100-H
PV Input		
Recommended Max.input power(kW)	45	75
Start-up voltage(V)	135	
Max.DC input voltage*(V)	1000	
Rated DC input voltage(V)	620	
MPPT voltage range*(V)	200 ~850	
No.of MPP trackers	4	
No.of DC inputs per MPPT	2 + 2+2+2	
Max.input current(A)	30×4	
Max.short-circuit current(A)	40×4	
Battery Side		
Battery type	Lithium Battery	
Battery voltage range(V)	135 ~750	
Maximum charging/discharge current(A)	100	
List of compatible batteries	Veichi, Deye, Must, SRNE, Felicity, etc. For more details, please visit veichi.com	
Grid Side		
Rated output power(kW)	30	50
Max.output apparent power(kVA)	33	55
Max.input apparent power(kVA)	36	60
Max.charging power of battery(kW)	30	50
Rated AC voltage	220/380, 230/400, 240/415, 3L/N/PE	
Rated AC frequency(Hz)	50/60	
Max.output current(A)	50	83
Power factor	-0.8 lagging ~ 0.8 leading	
Max.total harmonic distortion	< 3%	
Back-up Side		
Rated output power(kW)	30	50
Max.output apparent power(kVA)	33	55
Max.output current(A)	50	83
UPS switching time(ms)	10ms	
Rated output voltage	3L/N/PE; 220/380V; 230/400V; 240/415V	
Rated output frequency(Hz)	50/60	
Voltage harmonic distortion	< 3%	
Generator Side		
Maximum Apparent Input Power (kVA)	36	60
Rated Input Voltage	3L/N/PE; 220/380V; 230/400V; 240/415V	
Input Voltage Frequency (Hz)	50/60	
Maximum Input Current (A)	54.5	90.9
Efficiency		
Max.efficiency(%)	98.8	
European efficiency(%)	98.3	
Protection		
Integration	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, AC Output Overvoltage Protection AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault, Current Monitoring, Arc Fault Circuit Interrupter, Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch	
Over voltage category	PV:II Main:III	
General Data		
Dimensions [W×H×D(mm)]	800× 620 × 300	
Weight(kg)	72	
Protection degree	IP65	
Standby self-consumption	< 40	
Topology	Transformerless	
Operating Temperature Range(℃)	-30 ~ 60	
Relative Humidity(%)	0 ~ 100	
Operating Altitude(m)	3000 (>3000m derating)	
Cooling	Smart fan cooling	
Noise Level(dB)	<65	
Display	LED+LCD	
Communication	RS485/CAN/WIFI /LAN	

125kW–500kW
Modular C&I Energy Storage Solution
Flexible PCS / STS / MPPT Configuration



High-speed, reliable transfer
STS module enables ultra-fast transfer in <10ms for seamless switching between grid, off-grid, and diesel generator modes.

Maximized PV utilization
Dual modules support up to 240kW PV input, maximizing solar energy use for battery charging and load supply.

Parallel scalability
Multi-unit parallel operation enables smooth expansion up to 500kW, ideal for large C&I users and PV plants.

Integrated modular architecture
Integrates PCS, MPPT, STS, and EMS functions, with AC coupling support for all-in-one PV consumption and intelligent energy control.

Integrated EMS
Local and cloud-based operation supports zero-export control and time-of-use charging/discharging strategies.

Smart Energy Storage Battery System
- Remote monitoring & updates via inverter
- Low-power sleep mode
- Black start capability
- Insulation resistance test

VPM-PCS-0125



PCS Module	VPM-PCS-0125
Battery	
Battery Type	Lithium-Ion battery
Voltage Range (V)	630-1000
Max. Charge Current (A)	200
Max. Discharge Current (A)	200
Input Channels	1
AC Parameters	
Rated AC Active Power (kW)	125
Max. AC Apparent Power（kVA）	137.5
Rated Charge / Discharge Current（A）	189/181
Grid Connection	3L+N+PE
Overload Capability	1.1× continuous
Grid Voltage Range（V）	220/380 230/400 3L/N/PE
Grid Frequency Range（Hz）	50 / 60
THDi	< 3% @ Rated Power
Power Factor	-1~1
DC Parameters	
DC Voltage Range（V）	630~1000
Max. DC Current（A）	200
Interfaces	
Display	LCD
Communication Interfaces	WIFI/RS485/CAN/Meter
General	
Max. Efficiency	98%
Dimensions (mm)	543W×310H×775D
Overvoltage Level	OVC II(DC), OVC III(AC)
Weight（kg）	70
Noise（dB）	< 75
Protection Grade	IP54
Operating Temperature	-40°C to +60°C (Derating above 45°C)
Cooling Method	Intelligent air cooling
Relative Humidity	0~95%
Max. Altitude	3000m
EMC & Safety	IEC/EN 62477-1
Grid Compliance	IEC 61727, IEC 62116

VPM-PD-0120-M2Z4



MPPT Module	VPM-PD-0120-M2Z4
Input	
Max. PV Voltage（V）	950
MPPT Voltage Range（V）	250-950
Max. Current（A）	50+50+50+50
Max. Power（kW）	120
PV Inputs	2+2
Number of MPPTs	2
Full-Load Operating Voltage（V）	600-950
Output	
Voltage Range（V）	630-1000
Max. Current（A）	200
Voltage Accuracy	< 1%@100%Pn
Current Accuracy	< 1%@100%Pn
Efficiency	
Max. Conversion Efficiency	≥99%
Max. MPPT Efficiency	≥99.9%
Protection	
DC Arc Fault Protection	Supported
Surge Protection (Type II)	Supported
DC Reverse Polarity Protection	Supported
General	
Protection Grade	IP54
Max. Altitude	3000m
Cooling Method	Intelligent air cooling
Noise	<70dB
Dimensions (D × W × H)	560mmx440mm*163mm
Weight	34kg
EMC & Safety	IEC/EN 62109-1

VPM-STS-0500-T3NN



STS Module	VPM-STS-0250-T3NN	VPM-STS-0500-T3NN
PCS/Grid/GEN/Load-side date		
Rated Power（kW）	250	500
Max. Current（A）	379/362	758/725
Rated Grid Voltage（VAC）	220/380V 230/400V 3L/N/PE	
Grid Connection	3L/N/PE	
Rated Grid Frequency（Hz）	50/60	
Overload Capability	1.1× continuous	
General		
Grid / Off-Grid Transfer Time	≤10ms	
Cooling Method	Natural air cooling	
Max. Altitude	3000m	
Dimensions (W × D × H)	650mmx680mmx880mm	650mm×780mm×880mm
Protection Grade	IP20	
Overvoltage Level	OVC III	
EMC & Safety	IEC/EN 61439-1/-2	

VPS01 Series

Microgrid Hybrid 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

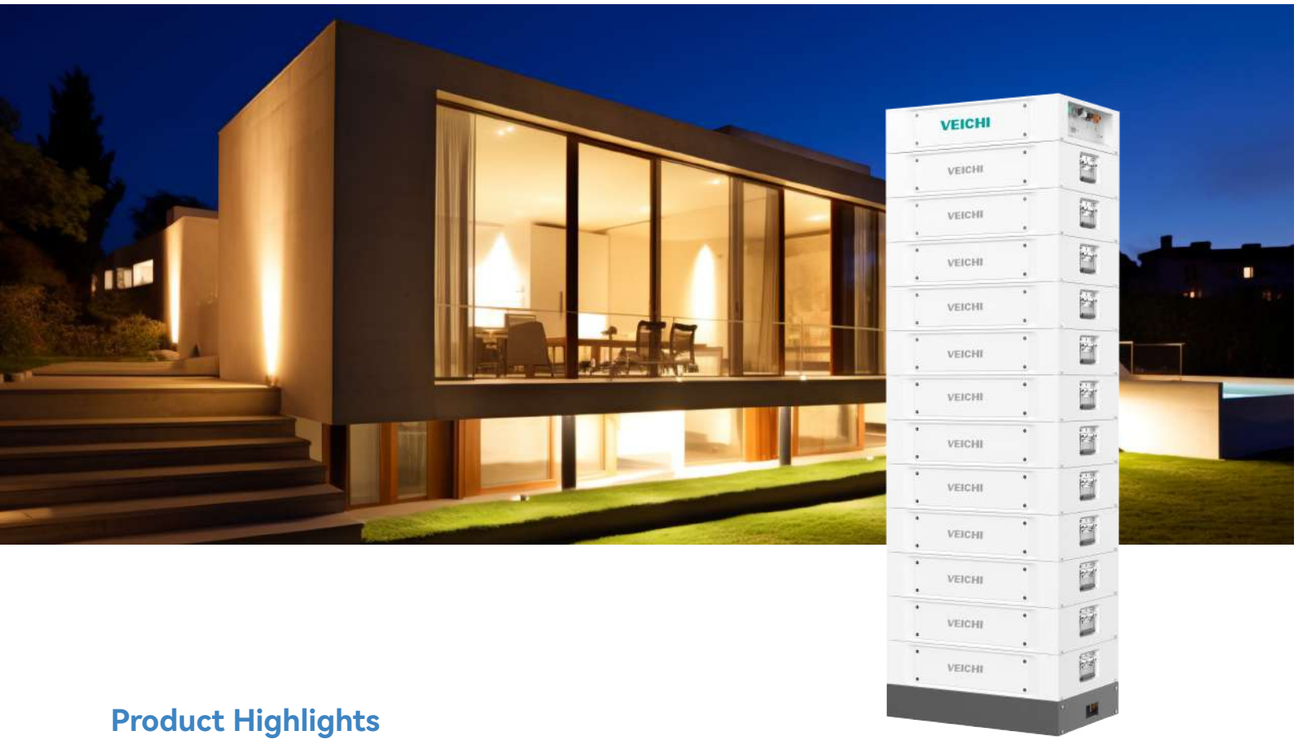
Intelligent O&M Management

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

Model	VPS01-0200-GE0A	VPS01-0300-GE0A	VPS01-0500-GE0A	VPS01-0800-GE0A	VPS01-1000-GE0A
AC (Grid-Connected)					
Maximum 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
Voltage range (V)	340~460				
Rated frequency (Hz)	50/60				
Frequency range(Hz)	45~55/55~65				
THDI	< 3% (Linear balanced load)				
Power Factor	1.0 (0.8 leading~0.8 lagging configurable)				
AC connection	Three-phase four-wire + Ground (3W+N+PE)				
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
THDU	<3% (Linear balanced load)				
Rated frequency (Hz)	50/60				
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	5/6	8/9/10	10/11/12
Isc(A)	240				
Max. discharge current(A)	200				
MPPT voltage range (V)	250~850				
Battery					
Max. charge power (kW)	240	360	600/720	960/1080/1200	1200/1320/1440
Battery voltage range (V)	630~900				
System Configuration					
Dimension[W/D/H](mm)	1350*900*2082	1450*900*2082	643*728*2082+ 2000*1100*2082	(643*728*2082)*2+ 2754*1303*2184	(643*728*2082)*2+ 2885*1305*2205
Net(kg)	1350	1830	353+2656	320*2+3900	353*2+4500
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	Forced fan cooling				
Display and Communication					
Display	LCD touch screen				
BMS communication	RS485, CAN				
Local communication	RS485, TCP/IP				

VCHB-61.4K-STF

High-Voltage Lithium Battery



Product Highlights

Flexible Expansion

Up to 12 clusters in parallel, with a capacity of 15kWh~737kWh
Wiring-free rackless stacking with plug-AND-play design enables SINGLE-cluster installation in 30 min

Universal Compatibility

Suitable for grid frequency regulation, charging stations, and other scenarios, enabling cost savings

Transport

Rackless design reduces transport space by 50%+ and shipping costs by 50%

Cooling System

Built-in air duct design enables faster cooling and minimizes foreign object intrusion

Safety

Intelligent fire extinguishing system detects and extinguishes fires within 5s

Model	VCHB-61.4K-STF							
General Specification								
Capacity(Ah)	153.6V100Ah	307.2V100Ah	358.4V100Ah	409.6V100Ah	460.8V100Ah	512V100Ah	563.2V100Ah	614.3V100Ah
Number of layers	3	6	7	8	9	10	11	12
Energy(kWh)	15.36	30.72	35.84	40.96	46.08	51.2	56.32	61.44
Operating voltage range(V)	133.8~172.8	267.6~345.6	312.2~403.2	356.8~460.8	401.4~518.4	446~576	492.8~633.6	537.6~691.2
Dimension(L*W*H)(mm)	590×390×632	590×390×1031	590×390×1164	590×390×1297	590×390×1430	590×390×1563	590×390×1696	590×390×1829
Weight(kg)	163	304	351	398	445	492	539	586
Recommend charge current(A)	50							
Max continue charge current(A)	100							
Max continue discharge current(A)	100							
Peakcurrent	1.25C@2min							
Communication	Support RS485/CAN							
Maximum parallel support	12 clusters(3 to 12 units per cluster)							
Charging temperature(℃)	0~55							
Discharge temperature(℃)	-20~55							
Environment	Indoor							
Cooling	Forcedwind cooling							
Celltechnology	Lithium-ironphosphate(LiFeP04)							
Protection rating	IP21							
Lifecycle	≥8000cycles/10Years, Testconditions:0.2CCharging/Discharging, @25℃,95%DOD							
Certificates	CB,IEC62619,CE-EMC,CE-GPSD,En62040,UN38.3,MSDS							
BDU Technical Specification								
Maximum voltage(V)	900							
Maximum charge/discharge current(A)	100							
Dimensions(mm)	590×390×133							
Weight(kg)	15.3							
Pack Technical Specification								
Cut-off voltage(V)	57.6							
Maximum charge/discharge current(A)	100							
Dimensions(mm)	590×390×233							
Weight(kg)	47							

VCHB-241K-314

High-Voltage Lithium Battery



Product Highlights

Flexible High-Voltage Scaling

Scalable from 3 to 15 modules (48 to 241 kWh) in series. Powered by a heavy-duty 1000V/250A master controller to minimize line loss and optimize efficiency

15+ Years Life & 6000+ Cycles

Engineered for long-term ROI with an exceptional 15+ year design life and ≥ 6000 cycles, ensuring minimal degradation in heavy applications

Smart BMS & Total Safety

Intelligent BMS features active cell balancing, precise SOC/SOH tracking, and millisecond-level protection against over-voltage, over-current, and temperature extremes

Seamless Smart Integration

Fully compatible with CANBUS, Modbus RTU, and TCP/IP protocols, enabling plug-and-play connection to EMS and third-party platforms for effortless remote digital O&M

Model	VCHB-241K-314												
Technical Specification	48kWh	64kWh	80kWh	96kWh	112kWh	128kWh	144kWh	160kWh	176kWh	192kWh	208kWh	225kWh	241kWh
Installation Mode	Racked												
Battery Type	LifePO4 (LFP)												
Module Energy (wh)	16076												
Module Nominal Voltage (V)	51.2												
Module Capacity (Ah)	314												
System Module	48kWh	64kWh	80kWh	96kWh	112kWh	128kWh	144kWh	160kWh	176kWh	192kWh	208kWh	225kWh	241kWh
Nominal Voltage(V)	DC 153.6V	DC 204.8V	DC 256V	DC 307.2V	DC 358.4V	DC 409.6V	DC 460.8V	DC 512V	DC 563.2V	DC 614.4V	DC 665.6V	DC 716.8V	DC 768V
Working Voltage(V)	DC139.2V ~172.8V	DC185.6V ~230.4V	DC232.0V~ 288.0V	DC278.4V ~345.6V	DC324.8V ~403.2V	DC371.2V ~460.8V	DC417.6V ~518.4V	DC 464.0V ~576.0V	DC510.4V ~633.6V	DC556.8V ~691.2V	DC 603.2V ~748.8V	DC 649.6V ~806.4V	DC 696.0V ~864.0V
Nominal Capacity (Ah)	314	314	314	314	314	314	314	314	314	314	314	314	314
Rated Energy (Wh)	48230	64307	80384	96460	112537	128614	144691	160768	176844	192921	208998	225075	241152
Dimension(mm)	547×799×1199	547×799×1463	547×799×1727	1054×799×1199		1054×799×1463		1054×799×1727		1054×799×1991		1054×799×2255	
Weight(Kg)	471.2	603.2	735.2	898.2	1019.2	1167.2	1288.2	1436.2	1557.2	1705.2	1826.2	1974.2	2095.2
Battery Module Qty In Series (Optional)	3	4	5	6	7	8	9	10	11	12	13	14	15
Recommend Charge/ Discharge Current (A)	157												
Communication	CAN												
Ingress Protection	IP20												
Altitude(m)	≤2000												
Cycle Life	25±2℃, 0.5C/0.5C, EOL70% ≥6000 times												
Monitoring Parameters	System voltage, Current, Cell voltage, Cell temperature, Module temperature												
SOC	Intelligent algorithm												
Working Temperature(℃)	Charge: 0~55℃, Discharge: -20~55℃												
Storage Temperture(℃)	0~35℃												

APPLICATION

Saudi C&I project

Application occasions(Required): Food Factory
Location(Required): Saudi Arabia
PV system (Optional): 620W Topcon 150kW
Storage capacity (Optional): 300kWh
Inverter model (Required): 2 pcs* 50KW-Hybrid inverter





Thailand C&I project

Application occasions(Required): Office
Location(Required): Thailand
PV system (Optional): 620w Topcon 60KW
Storage capacity (Optional): 56kWh
Inverter model (Required): 1 pcs* 50kW-Hybrid inverter





Syria Food refrigeration storage room project

Application occasions(Required): Food refrigeration storage room
Location(Required): Syria
Storage capacity (Optional): 100KW+102kWh
Inverter model (Required): 2*50KW VHT+2*51kwh Lithium battery





Syria Asmai hospital project

Application occasions(Required): Asmai hospital
Location(Required): Syria
Storage capacity (Optional): 100kW+30kWh
Inverter model (Required): 2*50kW VHT+1*30kWh Lithium battery



Hochimin, Vietnam

Application occasions(Required): Home use
Storage capacity (Optional): 5kWh
Inverter model (Required): VHS-5K-L01-K*1pcs
Battery model (Required): VEICHI VCLB-5K-D01, Lithium ion battery 5.12KWH 1pcs





Thailand

Application occasions(Required): Company
PV system (Optional): VEICHI ,VCS-132H-700-D
Storage capacity (Optional): 7.2kWh
Inverter model (Required): VHT-20K-40-H*1pcs
Battery model (Required): VEICHI ,56KWH lithium ion battery





Residential solar project in Lagos, Nigeria

Application occasions(Required): Home use
Location(Required): Lagos, Nigeria
PV system (Optional): 4.4kW
Storage capacity (Optional): 10kWh
Inverter model (Required): SV-6K-S*1pcs
Battery model (Required):SMS 51.2V 10kWh Lithium Battery



Residential solar project in Lagos, Nigeria

Application occasions(Required): Home use
Location(Required): Lagos, Nigeria
PV system (Optional): 4.4kW
Storage capacity (Optional): 5kWh
Inverter model (Required): SV-6K-S*1pcs
Battery model (Required):BICODI BD048100P05 51.2V 100Ah lithium battery



Residential solar project in Lagos, Nigeria

Application occasions(Required): Home use
Location(Required): Lagos, Nigeria
PV system (Optional): 3.3kW
Storage capacity (Optional): 5kWh
Inverter model (Required): SV-6K-S*1pcs
Battery model (Required):VEICHI VCLB-5K-W01 51.2V 100Ah lithium battery



Case sharing- Off-Grid BESS

High energy efficiency, superior operational performance, and high reliability make it suitable as an emergency power source for ports.



A Seaport in Hong Kong



A Port in Nanjing



A Seaport in Qingdao



A Seaport in Pakistan



A Seaport in Indonesia