

VHT-30K/50K-100-H

30A

PV Input Current

100%

Unbalanced Output

100A

Charge/Discharge

Commercial | Three Phase | HV Battery | 4 MPPTS

Features

Maximized Energy Harvesting

- 110% unbalanced output enhances self-consumption
- 100A charging/discharging for efficiency energy transfer
- Continuous 110% AC overloading sustains power
- Starts at 135V for more generation time

Engineered for Versatility

- 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

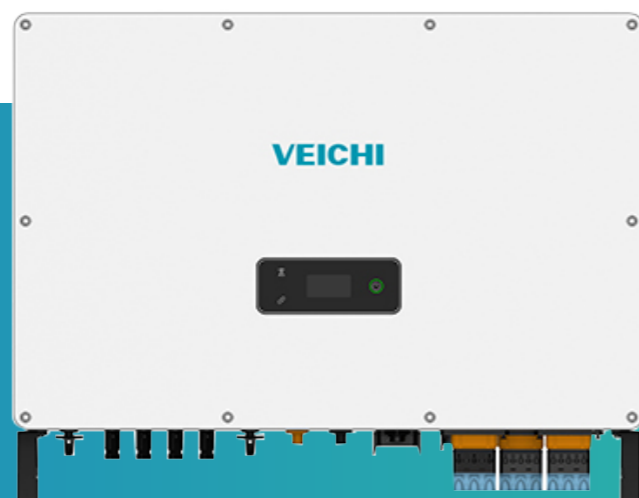
Intelligent Energy Dynamics

- Five work modes for diverse use
- Six charge/discharge intervals optimize control
- Centralized smart management for efficiency
- Supports diesel generators for diverse energy sourcing

Simplified Interaction

- Remote upgrades maintain system health
- OLED and App for easy control

VHT-30K/50K-100-H Hybrid Inverter



Technical Specifications

| Mode | VHT-30K-100-H | VHT-50K-100-H |
|---|------------------------------------|---------------|
| PV Input | | |
| Recommended Max.input power [kW] | 45.0 | 75.0 |
| Start-up voltage [V] | 135 | 135 |
| Max.DC input voltage* [V] | 1000* | 1000* |
| Rated DC input voltage [V] | 620 | 620 |
| MPPT voltage range* [V] | 200-850* | 200-850* |
| No.of MPP trackers | 4 | 4 |
| No.of DC inputs per MPPT | 2 | 2 |
| Max.input current [A] | 30x4 | 30x4 |
| Max.short-circuit current [A] | 40x4 | 40x4 |
| Battery Side | | |
| Battery type | Lithium Battery (with BMS) | |
| Battery voltage range [V] | 135-750 | |
| Maximum charging/discharge current [A] | 100/100 | |
| Grid Side | | |
| Rated output power [kW] | 30.0 | 50.0 |
| Max.output apparent power [kVA] | 33.0 ¹⁾ | 55.0 |
| Max.input apparent power** [kVA] | 36.0 | 60.0 |
| Max.charging power of battery [kW] | 30.0 | 50.0 |
| Rated AC voltage | 3L/N/PE;220/380V;230/400V;240/415V | |
| Rated AC frequency [Hz] | 50/60 | 50/60 |
| Max.output current [A] | 50.0 ²⁾ | 83.0 |
| Power factor | 0.8 leading...0.8 lagging | |
| Max.total harmonic distortion | <3%@Rated output power | |
| DCI | <0.5%In | <0.5%In |
| Back-up Side | | |
| Rated output power [kW] | 30.0 | 50.0 |
| Max.output apparent power [kVA] | 33.0 | 55.0 |
| Max.output current [A] | 50.0 | 83.0 |
| UPS switching time | <20ms | <20ms |
| Rated output voltage | 3L/N/PE;220/380V;230/400V;240/415V | |
| Rated output frequency [Hz] | 50/60 | 50/60 |
| Voltage harmonic distortion | <3%@Linear load | |
| Generator Side | | |
| Max.intput apparent power** [kVA] | 36.0 | 60.0 |
| Max.charging power of battery [kW] | 30.0 | 50.0 |
| Rated AC voltage | 3L/N/PE;220/380V;230/400V;240/415V | |
| Pated AC frequency [Hz] | 50/60 | 50/60 |
| Efficiency | | |
| Max.efficiency | 98.8% | 98.8% |
| European efficiency | 98.3% | 98.3% |
| Protection | | |
| DC reverse polarity protection | Integrated | |
| Battery input reverse connection protection | Integrated | |
| Insulation resistance protection | Integrated | |
| Surge protection | Integrated | |
| Over-temperature protection | Integrated | |
| Residual current protection | Integrated | |
| Islanding protection | Integrated | |
| AC over-voltage protection | Integrated | |
| Overload protection | Integrated | |
| AC short-circuit protection | Integrated | |
| General Data | | |
| Over voltage category | PV:II Main:III | |
| Dimensions [W×H×D mm] | 800×620×300 | |
| Weight [KG] | 72.0 | |
| Protection degree | IP65 | |
| Standby self-consumption [W] | <15 | |
| Topology | Transformerless | |
| Operating Temperature Range [°C] | -30~60 | |
| Relative Humidity [%] | 0~100 | |
| Operating Altitude [m] | 3000 (>3000m derating) | |
| Cooling | Smart fan | |
| Noise Level [dB] | <50 | |
| Display | OLED & LED | |
| Communication | CAN,RS485,WIFI/LAN (Optional) | |