



HUMLESS™

UNIVERSAL 6K GRID-TIED OR OFF-GRID INVERTER

Can be paired with energy storage or without (120/240v split phase)



UL9540, UL1741
(listed)

- 6k Hybrid multifunctional inverter works as a grid-tied string inverter without batteries or as a battery based inverter with batteries
- IP65 waterproof for indoor and outdoor installations
- Support multiple input & output—Split Phase 208/240Vac or Single Phase 240Vac
- Built-in WiFi for mobile monitoring (App is available)
- Built-in AC coupled function for PV solar inverter (single unit only, parallel function coming soon)
- Built-in alternative port for generator with two wire auto start
- Accepts second input power source, generator input compatible
- Built-in communication port for BMS (RS485)
- User-adjustable charging current and voltage
- Parallel operation up to 6 units
- UL 1741 - Inverters, Controllers and Interconnection System Equipment for use with Distributed Energy Resources [UL 1741:2010 Ed.2 (Supplement SA)+R:16Sep2020]

MODEL		6KW
Phase		120/240V Split phase, 120V/208V Split phase
Maximum PV Input Power		7500W
Rated Output Power		6000VA/6000W
Surge Power		9000W 5sec/Max Surge 12,000W 100ms
Maximum Charging Power		6000W
GRID-TIE OPERATION		
PV INPUT (DC)		
Maximum DC Voltage		600 VDC
Start-up Voltage / Initial Feeding Voltage		120VDC / 160 VDC
MPP Voltage Range		120 VDC ~ 550 VDC
Number of MPP Trackers / Maximum Input Current		2 / 15A
GRID OUTPUT (AC)		
Nominal Output Voltage		110 VAC (P-N) / 220 VAC (P-P)
Output Voltage Range		97-132VAC(P-N) / 194VAC-264VAC(P-P)
Nominal Output Current		27.3 A per phase
Power Factor		0.9 lag to 0.9 lead
EFFICIENCY		
Maximum Conversion Efficiency (DC/AC)		96%
OFF-GRID OPERATION		
AC INPUT		
AC Start-up Voltage / Auto Restart Voltage		85VAC(P-N), 170VAC(P-P) / 90VAC(P-N), 180VAC(P-P)
Acceptable Input Voltage Range		85 - 140 VAC (P-N)/ 170 - 280 VAC (P-P)
Frequency Range		50 Hz/60 Hz (Auto sensing)
Maximum AC Input Current		30 A per phase
PV INPUT (DC)		
Maximum DC Voltage		600 VDC
MPP Voltage Range		120 VDC ~ 550 VDC
Number of MPP Trackers / Maximum Input Current		2 / 15A
BATTERY MODE OUTPUT (AC)		
Nominal Output Voltage		110 VAC (P-N) / 220 VAC (P-P)
Output Waveform		Pure sine wave
Efficiency (DC to AC)		91%
HYBRID OPERATION		
PV INPUT (DC)		
Maximum DC Voltage		600 VDC
Start-up Voltage / Initial Feeding Voltage		120VDC / 160 VDC
MPP Voltage Range		120 VDC ~ 550 VDC
Number of MPP Trackers / Maximum Input Current		2 / 15A
GRID OUTPUT (AC)		
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Maximum AC Input Current		30 A per phase
BATTERY MODE OUTPUT (AC)		
Nominal Output Voltage		110 VAC (P-N) / 220 VAC (P-P)
Efficiency (DC to AC)		91%
BATTERY & CHARGER		
Nominal DC Voltage		42-62 VDC
Maximum Solar Charging Current		120 A
Maximum AC Charging Current		120 A
Maximum Charging Current		120 A
GENERAL		
PHYSICAL		
Dimension, D x W x H		8.48 in x 20.28 in x 27.56 in / 215.5mm x 515mm x 700mm
Net Weight		89 lbs / 0 kgs
INTERACE		
Parallel Function		Yes, 6 units
Communication Port		RS232, RS485, WI-FI, USB
ENVIRONMENT		
Protection Degree		IP65
Operating Temperature		-25°C to 60°C (>45°C derating)