



GLOBAL POWER



The GP16K22PV-US-GE is a versatile hybrid inverter designed for split-phase systems, supporting both 120V/240V and 120V/208V configurations. It includes a door-type cable compartment for simplified wiring and boasts a high 200A grid passthrough current. Its adaptable 3-stage charging works with both lead-acid and Lithium-ion batteries (with BMS support). Built-in WiFi and a mobile app enable remote monitoring. The inverter also features AC-coupling capability and accepts a generator as a secondary input source. For safety, it includes arc fault detection (AFD), rapid shutdown (RSD), and an EPO switch. Users can adjust the charging current and voltage, and the system supports parallel operation with up to 6 units.

Hybrid Inverter

GP16K22PV-US-GE Split-phase

- Support multiple input & output- 120V/240V Split phase, 120V/208V Split phase
- Door-type cable compartment
- Max. grid passthrough current 200A
- Built-in 300A DC breaker and 200A AC breaker
- 3-stage with equalization or self-adaption to BMS for Lithium-ion battery
- Built-in WiFi for mobile monitoring (APP is available)
- Built-in AC coupled function
- Accepts second input power source, generator input compatible
- Built-in arc fault detection (AFD) and rapid shutdown (RSD)
- Built-in communication port for BMS (RS485)
- User-adjustable charging current and voltage
- Parallel operation up to 6 units



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Hybrid Inverter

GP16K22PV-US-GE

Split-phase



GP16K22PV-US-GE Split-phase Hybrid Inverter Specification

MODEL	GP16K22PV-US-GE
PHASE	120V/240V Split phase, 120V/208V Split phase
Maximum PV Input Power	22000W
Rated Output Power	16000VA/16000W
Maximum Charging Power	250A
GRID-TIE OPERATION	
PV INPUT (DC)	
Maximum DC Voltage	500 VDC
Start-up Voltage / MPP Voltage Range	120VDC / 150 VDC ~ 450VDC
Number of MPP Trackers / Number of Strings Per MPP Trackers	4 / 2 + 2 + 2 + 2
Maximum Input Current	26A + 26A + 26A + 26A
GRID OUTPUT (AC)	
Nominal Output Voltage	120 VAC (P-N), 208 VAC (P-P), 240 VAC (P-P)
Output Voltage Range	105.5 VAC - 132 VAC (per phase)
Nominal Output Current	66.7A per phase
Power Factor	0.9 lag to 0.9 lead
EFFICIENCY	
Maximum Conversion Efficiency (DC/AC)	97.5%
OFF-GRID, HYBRID OPERATION	
PV INPUT (DC)	
Maximum DC Voltage	500 VDC
Start-up Voltage / MPP Voltage Range	120VDC / 150 VDC ~ 425 VDC
Number of MPP Trackers / Number of Strings Per MPP Trackers	4 / 2 + 2 + 2 + 2
Maximum Input Current	26A + 26A + 26A + 26A
AC INPUT	
AC Start-up Voltage / Auto Restart Voltage	85 VAC (per phase) / 90 VAC (per phase)
Acceptable Input Voltage Range	90 - 140 VAC (per phase)
Pass Through	200A
BATTERY MODE OUTPUT (AC)	
Nominal Output Voltage	120 VAC (P-N), 208 VAC (P-P), 240 VAC (P-P)
Output Waveform	Pure sine wave
Efficiency (DC to AC)	97.5%
AC Output Power	16000VA/16000W PV+BAT
BATTERY & CHARGER	
DC Voltage Range / Nominal Voltage	42-60 VDC / 48 VDC
Maximum Solar Charging Current	250A
Maximum AC Charging Current	250A
Maximum Charging Current	250A
GENERAL	
PHYSICAL	
Dimension, D x W x H (mm)	266.5 x 575 x 800
Net Weight (kgs)	73
INTERFACE	
Parallel Function	Yes, 6 units
Communication Port	RS232, RS485, WI-FI, USB, Dry contact, BMS
ENVIRONMENT	
Operating Temperature	-25°C to 60°C
PROTECTION & CERTIFICATE	
Safety	UL1741SA、UL1741SB、CSA22.2#107.1
Protection Degree	IEEE 1547.1:2020; IEEE 1547:2018
EMC	FCC Part 15
EMC	IP65
PV DC Switch - NEC 250.15	Yes
Ground Fault Detection — NEC 690.5	Yes
PV Rapid Shutdown Protection - NEC 690.12	Yes
PV Arc Fault Detection — NEC 690.11	Yes
PV Input Lightning Protection	Yes

*Output power will be derated according to internal temperature.
Product specifications are subject to change without further notice.