

FORTE

UNINTERRUPTIBLE POWER SUPPLY



GPM3300E Modular Series
(100kVA)

GPM3300E Modular Series ▶▶

Online Transformerless UPS series

Power range : 400 ~ 1200kVA (3-Level PF: 1.0)

Mode: 3 phase input and 3 phase output

Module: 100kVA



Modular design

- All units adopt modular design, including power module, bypass module, monitoring module, can be easily integrated
- Power module, Bypass module, Monitoring module, ECU control module, all these modules are hot-swappable

High reliability

- Wide input voltage range, line voltage range is 138–485V, UPS will derate to 40% when input voltage is below 323V
- UPS adopts multiple digital bus and redundancy parallel control system, making sure the whole system keep online if any single circuit fail
- The UPS will keep on single or parallel working, if any module fail
- Thickened conformal coating, applicable for harsh environment such as high heat, high humidity, dust

Green and power saving

- High input power factor, it is up to 0.99
- 3-level topology design, online efficiency up to 97%
- THDi<3% (100% linear load)
- The UPS will work in sleeping mode when the load is very small

HECO mode

- High performance mode, system efficiency up to 99%
- Inverter is in working state and has reactive power compensation and active power filter functions, improving input power factor and quality
- Automatic adjustment of inverter control mode to power the load when bypass is abnormal

VRLA&Lithium battery supportable

- Compatible with VRLA or lithium battery

Parallel redundancy function

- Support parallel expanded operation: maximum is 6 units
- Support sharing batteries for the UPS in parallel

Strong load capability

- Output power factor is 1.0, UPS can supply power to 100% unbalanced load
- High adaptability for load, it can connect full inductive load or capacitive load

Intelligent management

- With 7 inches (Standard) and 10 inches (Optional) colorful touch LCD screen
- Support recording and exporting history logs and fault logs
- Support SNMP, RS232, RS485, BMS, Dry contact interface
- Support upgrading FW&SW on line
- EPO & REPO function
- Support wave recording when any fault occurs
- Support key components lifecycle management

Compatible with generator

- Power Walk In function, it can reduce the start current impact to system, and it can reduce the capacity of generator

LBS function

- LBS function can realize 2 independent UPS system work in synchronization, and it enhances the reliability of the system

Technical Specifications:

| Module Model | GPM3300E-RM-100 | | | | | |
|------------------|-----------------|--------------|--------------|--------------|---------------|---------------|
| Cabinet Model | GPM3300E-400 | GPM3300E-500 | GPM3300E-600 | GPM3300E-800 | GPM3300E-1000 | GPM3300E-1200 |
| Cabinet capacity | 400kVA | 500kVA | 600kVA | 800kVA | 1000kVA | 1200kVA |
| Module capacity | 100kVA | | | | | |
| Max. number | 4 | 5 | 6 | 8 | 10 | 12 |

INPUT

| | | | | | | |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|
| Nominal voltage | 380/400/415Vac, (3Ph+N+PE) | | | | | |
| Operating voltage range | 138~322Vac for 40% Load; 323~485Vac for 100% Load; | | | | | |
| Operating frequency range | 40Hz~70Hz | | | | | |
| Power factor | ≥0.99 | | | | | |
| Harmonic distortion (THDi) | ≤3% (100% Linear load) | | | | | |
| Bypass voltage range | Max. voltage: 220V: +25% (Optional +10%, +15%, +20%) 230V: +20% (Optional +10%, +15%) 240V: +15% (Optional +10%) Min. voltage: -45% (Optional -10%, -15%, -20%, -30%) | | | | | |
| Bypass frequency range | Frequency protection range: ±10% | | | | | |
| Generator input | Support | | | | | |

OUTPUT

| | | | | | | |
|----------------------------|-----------------------------------------------------------------------------------------------------------|--|--|--|--|--|
| Rated voltage | 380/400/415Vac, (3Ph+N+PE) | | | | | |
| Power factor | 1.0 | | | | | |
| Voltage regulation | ±1% | | | | | |
| Output frequency | Synchronize with input, when the input frequency > ±10% (±1%/±2%/±4%/±5% optional), output 50/60 (±0.1Hz) | | | | | |
| Crest factor | 3:1 | | | | | |
| Harmonic distortion (THDv) | ≤1% with linear load; ≤3% with nonlinear load | | | | | |
| Efficiency | Up to 97% | | | | | |

BATTERY

| | | | | | | |
|-----------------------------|---------------|--|--|--|--|--|
| Battery voltage | 360Vdc~600Vdc | | | | | |
| Battery type | VRLA / Li | | | | | |
| Power module charge current | 100A (Max.) | | | | | |

SYSTEM FEATURES

| | | | | | | |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|--|--|--|--|
| Transfer time | Utility to Battery: 0ms; Utility to bypass: 0ms | | | | | |
| Overload | Inverter mode | ≤110% 60min, ≤125% 10min, ≤150% 1min, >150% 1.2s shut down inverter | | | | |
| | Bypass mode | 30°C: 135% overload for long term; 40°C: 125% overload for long term; >1000% overload for 100 ms | | | | |
| Overheat | Line Mode: Switch to Bypass; Backup Mode: Shut down UPS immediately | | | | | |
| Low battery voltage | Alarm and Switch off | | | | | |
| Self-diagnostics | Upon Power On and Software Control | | | | | |
| Backfeed | Support | | | | | |
| EPO (Optional) | Shut down UPS immediately (Turn to bypass optional) | | | | | |
| Battery | Advanced Battery Management | | | | | |
| Noise suppression | Complies with EN62040-3 | | | | | |
| Audible & visual alarms | Line Failure, Battery Low, Overload, System Fault | | | | | |
| Status LED & LCD display | Line Mode, Bypass Mode, Battery Low, Battery Fault, Overload & UPS Fault | | | | | |
| Reading on the LCD display | Input, Output, Battery, Command, Setting, Maintenance | | | | | |
| Communication interface | RS232, RS485, Parallel, LBS, BMS, Dry contact port, Relay card(Optional), SNMP card(Optional), Battery temperature sensor(Optional) | | | | | |

ENVIRONMENTAL

| | | | | | | |
|-----------------------|-----------------------------------------|--|--|--|--|--|
| Operating temperature | 0°C ~ 40°C | | | | | |
| Storage temperature | -40°C ~ 70°C | | | | | |
| Humidity range | 0 ~ 95% (Non condensing) | | | | | |
| Altitude | < 1000m, derating required when > 1000m | | | | | |
| Noise level | < 70dB | | | | | |

PHYSICAL

| | | | | | | | |
|------------------------|-----------------|------------------------|-------|-------|----------------------|----------------------|-------|
| Dimension W × D × H | UPS cabinet (S) | 800 × 1000 × 2000mm | | | 800 × 1000 × 2000mm | 1400 × 1000 × 2000mm | |
| | UPS cabinet (F) | | | | 1400 × 1000 × 2000mm | 1800 × 1000 × 2000mm | |
| | Power module | 440 × 755 × 130mm (3U) | | | | | |
| Net weight | UPS cabinet (S) | 305kg | 330kg | 350kg | 405kg | 690kg | 760kg |
| | UPS cabinet (F) | 350kg | 380kg | 410kg | 780kg | 850kg | 920kg |
| | Power module | 52.5kg | | | | | |

STANDARDS

| | | | | | | |
|--------|------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|
| Safety | IEC/EN 62040-1, IEC/EN 62477-1 | | | | | |
| EMC | IEC/EN 62040-2 (IEC 61000-2-2, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11) | | | | | |

S: Without or only with one maintenance bypass breaker

F: With mains, bypass, maintenance bypass and output breakers

1. Specifications are subject to change without prior notice

2. Data above are typical values for reference only, not as a basis for engineering design



CONTACT
Tel: +7 701 872 24 87
Tel: +7 705 657 96 70
E-mail: info@pes-power.kz
pes-power.kz