



# HP Modular Series UPS 10-30KVA

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## 10-30KVA



### Online Transformerless UPS series

Power range : 10 ~ 150kVA (3-Level PF: 1.0)

Mode: 3 phase input and 3 phase output

Module: 10/15/20/25/30kVA

### 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 305V
- 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, efficiency is up to 95.8%
- THDi < 3% (100% linear load)
- The UPS will work in sleeping mode when the load is very small

### LBS function

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

### Parallel redundancy function

- Support parallel expanded operation: maximum is 8 units
- Support sharing batteries for the UPS in parallel

### Flexible battery configuration

- Batteries number of each group can be selected from 30 pieces to 50 pieces
- Large charging current can meet the requirement of long time backup

### Strong load capacity

- 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, Dry contact interface
- Support upgrading FW&SW on line
- EPO & REPO function

### Compatible with generator

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



## Technical Specifications:

|                             |               |                                                                                                                                                                                                                                        |              |
|-----------------------------|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| Module Model                |               | HP 3300E-RM-10                                                                                                                                                                                                                         |              |
| Cabinet Model               |               | HP 3300E-30                                                                                                                                                                                                                            | HP 3300E-50  |
| Cabinet capacity            |               | 30kVA                                                                                                                                                                                                                                  | 50kVA        |
| Module capacity             |               | 10kVA                                                                                                                                                                                                                                  |              |
| Max. number                 |               | 3                                                                                                                                                                                                                                      | 5            |
| Module Model                |               | HP 3300E-RM-15                                                                                                                                                                                                                         |              |
| Cabinet Model               |               | HP 3300E-45                                                                                                                                                                                                                            | HP 3300E-75  |
| Cabinet capacity            |               | 45kVA                                                                                                                                                                                                                                  | 75kVA        |
| Module capacity             |               | 15kVA                                                                                                                                                                                                                                  |              |
| Max. number                 |               | 3                                                                                                                                                                                                                                      | 5            |
| Module Model                |               | HP 3300E-RM-20                                                                                                                                                                                                                         |              |
| Cabinet Model               |               | HP 3300E-60                                                                                                                                                                                                                            | HP 3300E-100 |
| Cabinet capacity            |               | 60kVA                                                                                                                                                                                                                                  | 100kVA       |
| Module capacity             |               | 20kVA                                                                                                                                                                                                                                  |              |
| Max. number                 |               | 3                                                                                                                                                                                                                                      | 5            |
| Module Model                |               | HP 3300E-RM-25                                                                                                                                                                                                                         |              |
| Cabinet Model               |               | HP 3300E-50                                                                                                                                                                                                                            | HP 3300E-125 |
| Cabinet capacity            |               | 50kVA                                                                                                                                                                                                                                  | 125kVA       |
| Module capacity             |               | 25kVA                                                                                                                                                                                                                                  |              |
| Max. number                 |               | 2+1 (Redundancy)                                                                                                                                                                                                                       | 5            |
| Module Model                |               | HP 3300E-RM-30                                                                                                                                                                                                                         |              |
| Cabinet Model               |               | HP 3300E-60                                                                                                                                                                                                                            | HP 3300E-150 |
| Cabinet capacity            |               | 60kVA                                                                                                                                                                                                                                  | 150kVA       |
| Module capacity             |               | 30kVA                                                                                                                                                                                                                                  |              |
| Max. number                 |               | 2+1 (Redundancy)                                                                                                                                                                                                                       | 5            |
| INPUT                       |               |                                                                                                                                                                                                                                        |              |
| Nominal voltage             |               | 380/400/415Vac, (3Ph+N+PE)                                                                                                                                                                                                             |              |
| Operating voltage range     |               | 138 ~ 305Vac for 40% load; 305 ~ 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%)<br>230V: +20% (Optional +10%, +15%)<br>240V: +15% (Optional +10%)<br>Min. voltage: -45% (Optional -10%, -15% -20%, -30%)                                                          |              |
| Bypass frequency range      |               | Frequency protection range: ±10%                                                                                                                                                                                                       |              |
| Power walk in               |               | Support                                                                                                                                                                                                                                |              |
| Generator input             |               | Support                                                                                                                                                                                                                                |              |
| OUTPUT                      |               |                                                                                                                                                                                                                                        |              |
| Rated voltage               |               | 380/400/415Vac, (3Ph+N+PE)                                                                                                                                                                                                             |              |
| Power factor                |               | 1.0                                                                                                                                                                                                                                    |              |
| Voltage regulation          |               | ±1%                                                                                                                                                                                                                                    |              |
| Output frequency            | Line mode     | Synchronize with input, when the input frequency > ±10% ( ±1%/ ±2%/ ±4%/ ±5% optional), output 50/60 (±0.1Hz)<br>(50/60 ±0.1%)Hz                                                                                                       |              |
|                             | Bat. mode     |                                                                                                                                                                                                                                        |              |
| Crest factor                |               | 3:1                                                                                                                                                                                                                                    |              |
| Harmonic distortion (THDv)  |               | ≤1% with linear load; ≤3% with nonlinear load                                                                                                                                                                                          |              |
| Efficiency                  |               | Up to 95.8%                                                                                                                                                                                                                            |              |
| BATTERY                     |               |                                                                                                                                                                                                                                        |              |
| Battery voltage             |               | ±180/192/204/216/228/240/252/264/276/288/300Vdc (30/32/34/36/38/40/42/44/46/48/50pcs, 36pcs default, 36~50pcs output power factor 1.0, 32~34pcs output power factor 0.9, 30pcs output power factor 0.8)                                |              |
| Power module charge current |               | 18A (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<br>30°C: 135% for long term; 40°C: 125% for long term; >100%, 100ms<br>Line Mode: Switch to Bypass; Backup Mode: Shut down UPS immediately<br>Alarm and Switch off |              |
|                             | Bypass mode   |                                                                                                                                                                                                                                        |              |
| Overheat                    |               |                                                                                                                                                                                                                                        |              |
| Low battery voltage         |               |                                                                                                                                                                                                                                        |              |
| Self-diagnostics            |               | Upon Power On and Software Control                                                                                                                                                                                                     |              |
| Backfeed protection         |               | 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, Dry contact port, Relay card (Optional), SNMP card (Optional), Battery temperature sensor (Optional)                                                                                                      |              |
| ENVIRONMENTAL               |               |                                                                                                                                                                                                                                        |              |
| Operating temperature       |               | 0°C ~ 40°C                                                                                                                                                                                                                             |              |
| Storage temperature         |               | -25°C ~ 55°C                                                                                                                                                                                                                           |              |
| Humidity range              |               | 0 ~ 95% (Non condensing)                                                                                                                                                                                                               |              |
| Altitude                    |               | < 1000m, derating required when > 1000m                                                                                                                                                                                                |              |
| Noise level                 |               | < 58dB                                                                                                                                                                                                                                 | < 61dB       |
| PHYSICAL                    |               |                                                                                                                                                                                                                                        |              |
| Dimension                   | UPS cabinet   | 600 × 850 × 1200mm                                                                                                                                                                                                                     |              |
| W × D × H                   | Power module  | 440 × 620 × 86mm (2U)                                                                                                                                                                                                                  |              |
| Net weight                  | UPS cabinet   | 130kg~145kg                                                                                                                                                                                                                            | 145kg~170kg  |
|                             | Power module  | 10kVA: 19kg; 15~30kVA: 21kg                                                                                                                                                                                                            |              |
| STANDARDS                   |               |                                                                                                                                                                                                                                        |              |
| Safety                      |               | IEC/EN 62040-1, IEC/EN 62477-1                                                                                                                                                                                                         |              |
| EMC                         |               | IEC/EN 62040-2 IEC/EN 61000-2-2 IEC/EN 61000-4-2 IEC/EN 61000-4-3 IEC/EN 61000-4-4 IEC/EN 61000-4-5 IEC/EN 61000-4-6 IEC/EN 61000-4-8 IEC/EN 61000-4-11                                                                                |              |

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