

# HP33ETS SERIES

Online Transformerless UPS series

Mode: 3 phase input and 3 phase output

Power range : 200 ~ 1200kVA (3-Level PF: 1.0)



### High reliability 高可靠性

- Wide input voltage range, line voltage range is 138-485V, UPS will derate to 40% when input voltage is below 305V.  
输入电压范围宽，线路电压范围为138-485V，当输入电压低于305V时，UPS将降额至40%。
- Thickened conformal coating, applicable for harsh environment such as high heat, high humidity, dust.  
加厚保形涂层，适用于高温、高湿、多尘等恶劣环境。

### Green and power saving 绿色节能

- High input power factor, it is up to 0.99. 输入功率因数高，可达0.99。
- 3-level topology design, efficiency is up to 96%. 三电平拓扑设计，效率可达96%。
- THDi < 3% (100% linear load). THDi < 3% (100%线性负载)。
- The UPS will work in sleeping mode when the load is very small. 当负载很小的时候，UPS会进入休眠模式。

### LBS function LBS功能

- LBS function can realize 2 independent UPS system work in synchronization, and it enhances the reliability of the system. LBS功能可实现2个独立UPS系统同步工作，增强了系统的可靠性。

### Intelligent management 智能管理

- With 7 inches (Standard) and 10 inches (Optional) colorful touch LCD screen.  
配备7英寸（标配）和10英寸（选配）彩色触摸液晶屏。
- Support recording and exporting history logs and fault logs.  
支持记录和导出历史日志和故障日志。
- Support SNMP, RS232, RS485, BMS, Dry contact interface.  
支持SNMP、RS232、RS485、BMS、干接点接口。

### VRLA&Lithium battery supportable 支持 VRLA 和锂电池

- Compatible with VRLA or lithium battery. 兼容 VRLA 或锂电池。

### Parallel redundancy function 并联冗余功能

- Support parallel expanded operation: maximum is 8 units. 支持并联扩展运行：最大8台。
- Support sharing batteries for the UPS in parallel. 支持并联UPS共享电池。

### Strong load capacity 带载能力强

- Output power factor is 1.0, UPS can supply power to 100% unbalanced load.  
输出功率因数1.0，UPS可给100%不平衡负载供电。
- High adaptability for load, it can connect full inductive load or capacitive load.  
负载适应性强，可接全感性负载或容性负载。

Model 型号	HP33ETS-200	HP33ETS-250	HP33ETS-300	HP33ETS-400
Capacity 容量	200kVA	250kVA	300kVA	200kVA
<b>INPUT 输入</b>				
Nominal voltage 标称电压	380/400/415Vac, (3Ph+N+PE)			
Operating voltage range 工作电压范围	138 ~ 305Vac for 40% Load; 305 ~ 485Vac for 100% Load;			
Operating frequency range 工作频率范围	40Hz-70Hz			
Power factor 功率因数	≥0.99			
Harmonic distortion (THDi) 谐波失真	≤3% (100% Linear load)			
Bypass voltage range 旁路电压范围	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 旁路频率范围	±10%			
Power walk in 电源输入	Support			
Generator input 发电机输入	Support			
<b>OUTPUT 输出</b>				
Rated voltage 额定电压	380/400/415Vac, (3Ph+N+PE)			
Power factor 功率因数	1.0			
Voltage regulation 电压调节	±1%			
Output frequency 输出频率	Line mode 线路模式	Synchronize with input, when the input frequency > ±10% (±1%/±2%/±4%/±5% optional), output 50/60 (±0.1Hz)		
	Bat. mode 电池模式	(50/60±0.1%)Hz		
Crest factor 波峰因数	3:1			
Harmonic distortion (THDv) 谐波失真	≤2% with linear load; ≤4% with nonlinear load			
Efficiency 效率	Up to 96%			
<b>BATTERY 电池</b>				
Battery voltage 电池电压	360Vdc ~ 600Vdc			
Battery type 电池类型	VRLA / Li			
Power module charge current 电池模块充电电流	80A (Max.)	100A (Max.)	140A (Max.)	
<b>SYSTEM FEATURES 系统特性</b>				
Transfer time 转换时间	Utility to Battery: 0ms; Utility to bypass: 0ms			
Overload 过载	Inverter mode 逆变模式	≤110% 60min, ≤125% 10min, ≤150% 1min, > 150% 1.2s shut down inverter		
	Bypass mode 旁路模式	30 C : 135% for long term; 40 C : 125% for long term; >100% 100ms		
Overheat 过热	Line Mode: Switch to Bypass; Backup Mode: Shut down UPS immediately			
Low battery voltage 电池电压低	Alarm and Switch off			
Self-diagnostics 自我诊断	Upon Power On and Software Control			
Backfeed protection 反馈保护	Support			
EPO (Optional) EPO选择	Shut down UPS immediately (Turn to bypass optional)			
Battery 电池	Advanced Battery Management			
Noise suppression 噪音抑制	Complies with EN62040-3			
Audible & visual alarms 声音和视觉警报	Line Failure, Battery Low, Overload, System Fault			
Status LED & LCD display 状态LED和LCD显示屏	Line Mode, Bypass Mode, Battery Low, Battery Fault, Overload & UPS Fault			
Reading on the LCD display LCD显示屏上的读数	Input, Output, Battery, Command, Setting, Maintenance			
Communication interface 通信接口	RS232, RS485, Parallel, LBS, BMS, Dry contact port, Relay card(Optional), SNMP card(Optional), Battery temperature sensor(Optional)			
<b>ENVIRONMENTAL 环境</b>				
Operating temperature 工作温度	0 C ~ 40 C			
Storage temperature 存储温度	-25 C ~ 55 C			
Humidity range 湿度范围	0 ~ 95% (Non condensing)			
Altitude 海拔	< 1000m, derating required when > 1000m			
Noise level 噪音水平	< 63dB	< 65dB	< 70dB	
<b>PHYSICAL 物理</b>				
Dimension W×D×H(S/F) 尺寸	600×850×2000mm			
Net weight 净重	406kg	440kg	460kg	548kg
<b>STANDARDS 标准</b>				
Safety 安全	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.

Model 型号	HP33ETS-500	HP33ETS-600	HP33ETS-800	HP33ETS-1000	HP33ETS-1200
Capacity 容量	500VA	600VA	800kVA	1000kVA	1200kVA
<b>INPUT 输入</b>					
Nominal voltage 标称电压	380/400/415Vac, (3Ph+N+PE)				
Operating voltage range 工作电压范围	138 ~ 305Vac for 40% Load; 305 ~ 485Vac for 100% Load;				
Operating frequency range 工作频率范围	40Hz-70Hz				
Power factor 功率因数	≥0.99				
Harmonic distortion (THDi) 谐波失真	≤3% (100% Linear load)				
Bypass voltage range 旁路电压范围	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 旁路频率范围	±10%				
Power walk in 电源输入	Support				
Generator input 发电机输入	Support				
<b>OUTPUT 输出</b>					
Rated voltage 额定电压	380/400/415Vac, (3Ph+N+PE)				
Power factor 功率因数	1.0				
Voltage regulation 电压调节	±1%				
Output frequency 输出频率	Line mode 线路模式	Synchronize with input, when the input frequency > ±10% (±1%/±2%/±4%/±5% optional), output 50/60 (±0.1Hz)			
	Bat. mode 电池模式	(50/60±0.1%)Hz			
Crest factor 波峰因数	3:1				
Harmonic distortion (THDv) 谐波失真	≤2% with linear load; ≤4% with nonlinear load				
Efficiency 效率	Up to 96%				
<b>BATTERY 电池</b>					
Battery voltage 电池电压	360Vdc ~ 600Vdc				
Battery type 电池类型	VRLA / Li				
Power module charge current 电池模块充电电流	180A (Max.)	200A (Max.)	280A (Max.)	360A (Max.)	400A (Max.)
<b>SYSTEM FEATURES 系统特性</b>					
Transfer time 转换时间	Utility to Battery: 0ms; Utility to bypass: 0ms				
Overload 过载	Inverter mode 逆变模式	≤110% 60min, ≤125% 10min, ≤150% 1min, >150% 1.2s shut down inverter			
	Bypass mode 旁路模式	30°C: 135% for long term; 40°C: 125% for long term; >1000V, 100ms			
Overheat 过热	Line Mode: Switch to Bypass; Backup Mode: Shut down UPS immediately				
Low battery voltage 电池电压低	Alarm and Switch off				
Self-diagnostics 自我诊断	Upon Power On and Software Control				
Backfeed protection 反馈保护	Support				
EPO (Optional) EPO选择	Shut down UPS immediately (Turn to bypass optional)				
Battery 电池	Advanced Battery Management				
Noise suppression 噪音抑制	Complies with EN62040-3				
Audible & visual alarms 声音和视觉警报	Line Failure, Battery Low, Overload, System Fault				
Status LED & LCD display 状态LED和LCD显示屏	Line Mode, Bypass Mode, Battery Low, Battery Fault, Overload & UPS Fault				
Reading on the LCD display LCD显示屏上的读数	Input, Output, Battery, Command, Setting, Maintenance				
Communication interface 通信接口	RS232, RS485, Parallel, LBS, BMS, Dry contact port, Relay card(Optional), SNMP card(Optional), Battery temperature sensor(Optional)				
<b>ENVIRONMENTAL 环境</b>					
Operating temperature 工作温度	0°C ~ 40°C				
Storage temperature 存储温度	-25°C ~ 55°C				
Humidity range 湿度范围	0 ~ 95% (Non condensing)				
Altitude 海拔	<1000m, derating required when >1000m				
Noise level 噪音水平	<70dB	<73dB	<74dB		
<b>PHYSICAL 物理</b>					
Dimension W×D×H(S/F) 尺寸	1200×850×2000mm		2000×850×2000mm		2200×850×2000mm
Net weight 净重	956kg	1060kg	1422kg	1658kg	1980kg
<b>STANDARDS 标准</b>					
Safety 安全	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.