

Online Transformer less UPS series  
Power range: 50~200kVA (3-Level PF: 1.0)

Mode: 3 phase input and 3 phase output

## Features

### High reliability design

- Wide input voltage range 138~485Vac (Phase voltage 80~280Vac), no derating when input voltage  $\geq$  305Vac.

### Power saving

- High input power factor, it can be up to 0.99.
- 3-level inverter topology, the efficiency can be up to 95.5%.

### Parallel redundancy function

- Support parallel expanded operation: maximum is 6 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% unbalance load.
- High adaptability for load, it can connect full inductive load or capacitive load.

### 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.

### Intelligent management

- Support USB, RS485, RS232, SNMP, dry contact card.

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## Technical Specifications:

MODEL	AP3350H	AP3360H	AP3380H	AP33100H	AP33120H	AP33150H	AP33160H	AP33180H	AP33200H	
Capacity (VA/Watts)	50k/50k	60k/60k	80k/80k	100k/100k	120k/120k	150k/150k	160k/160k	180k/180k	200k/200k	
<b>INPUT</b>										
Nominal voltage	380/400/415Vac (3Ph+N+PE)									
Operating voltage range	138~485Vac for 40% load; 305~485Vac for full-load									
Operating frequency range	40~70Hz (50/60Hz Auto-Sensing)									
Power factor	≥0.99									
Harmonic distortion (THDi)	≤3% 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-20%,-30%)									
Frequency protection range	50/60Hz ± 10%									
Generator input	Support									
<b>OUTPUT</b>										
Output voltage	380/400/415Vac (3Ph+N+PE)									
Voltage regulation	± 1%									
Power factor	1.0									
Output frequency	Line Mode	± 1%/ ± 2%/ ± 4%/ ± 5%/ ± 10% of the rated frequency (Optional)								
	Bat. Mode	(50/60 ± 0.2%)Hz								
Crest factor	3:1									
Harmonic distortion (THDv)	≤2% with linear load ≤4% with non linear load									
Overload	AC Mode	Load ≤ 110%: last 60min, ≤ 125%: last 10min, ≤ 150%: last 1min, >150%: turn to bypass immediately							Load ≤ 110%: last 60min, ≤ 125%: last 1min, >125%: last 1.2s	
	Bypass Mode	135% overload long time; >1000% overload 100ms								
<b>EFFICIENCY</b>										
Efficiency	up to 95.5%									
<b>BATTERY</b>										
Battery voltage	Optional Voltage: ± 180/ ± 192/ ± 204/ ± 216/ ± 228/ ± 240/ ± 252/ ± 264/ ± 276/ ± 288/ ± 300Vdc(30/32/34/36/38/40/42/44/46/48/50pcs optional); 360Vdc~600Vdc (30~50pcs, 30pcs default, 36~50pcs output power factor 1.0; 32~34pcs output power factor 0.9; 30pcs output power factor 0.8)									
Charge Current (charge current can be set according to battery capacity installed)	20A Max.		40A Max.				60A Max.			
<b>SYSTEM FEATURES</b>										
Transfer time	Utility to Battery: 0ms; Utility to Bypass: 0ms									
Backfeed protection	Support									
Alarm	Overload, utility abnormal, UPS fault, battery low, etc									
Protection	Short circuit, overload, over temperature, battery low, fan fault alarm									
Remote LCD	Support									
Communication	USB, RS232, RS485, parallel port, dry contact, intelligent slot, LBS, SNMP card (Optional), relay card (Optional)									
<b>ENVIRONMENTAL</b>										
Operating temperature	0°C ~ 40°C									
Storage temperature	25°C ~ 55°C(No battery)									
Humidity range	0 ~ 95% (Non condensing)									
Altitude	<1500m, derating required when >1500m									
Noise level	<55dB	<58dB	<60dB	<62dB	<63dB	<64dB	<64dB	<66dB	<66dB	
<b>PHYSICAL</b>										
Dimension W × D × H (mm)	250 x 828 x 868				442 x 850 x 1200					
Net weight (kg)	80	83	140	160	170	200	205	215	220	
<b>STANDARDS</b>										
Safety	IEC/EN62040-1, IEC/EN62477-1									
EMC	IEC/EN62040-2 (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)									