

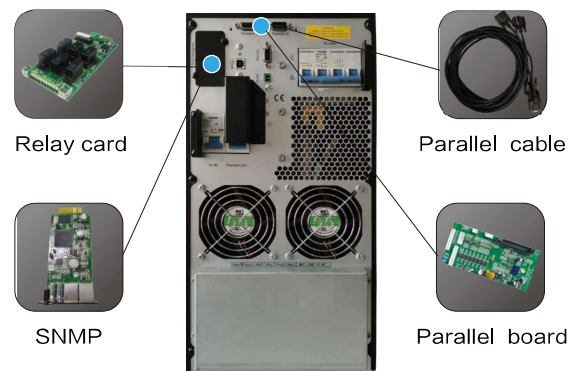
3:1 phase PF 0.9

Power range: 10kVA ~ 20kVA



## Features

- Support parallel function (Optional)
- Online double conversion with DSP control
- Optimization battery group, the quantity of battery: 16/18/20pcs
- Wide input voltage range: 208~478Vac
- Wide input frequency range: 40~70Hz
- Maximum charging current up to 18A (Settable)
- Support 3/1 and 1/1 operation
- Generator compatible
- ECO mode operation for energy saving
- Design with maintenance switch
- Cold start
- Intelligent fan speed regulation
- Self-testing when UPS startup
- 50/60Hz frequency converter mode
- Colorful 2.4 inch TFT LCD display is optional
- Multiple protection function: short-circuit, overload, overheat, battery overcharge and overdischarge, output low voltage and fan fault alarm
- Multiple communication interface: RS232/USB/EPO (Relay card/SNMP card/Parallel kit optional)



## Technical Specifications:

MODEL	MP31 10k H	MP31 10k S	MP31 15k H	MP31 15k S	MP31 20k H	MP31 20k S
Capacity	10kVA/9kW		15kVA/13.5kW		20kVA/18kW	

### INPUT

Nominal voltage	380/400/415Vac (3PH+N+PE) 220/230/240Vac (L+N+PE)					
Operating voltage range	208 ~ 478Vac; 120 ~ 276Vac					
Operating frequency range	40 ~ 70Hz (50/60Hz Auto-Sensing)					
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

Frequency protection range	50/60Hz ± 10%					
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### OUTPUT

Output voltage		220/230/240Vac (L+N+PE)		
Voltage regulation		± 1%		
Power factor		0.9		
Output frequency	Line mode	± 1%/ ± 2%/ ± 4%/ ± 5%/ ± 10% of the rated frequency (Optional)		
	Bat. mode	(50/60 ± 0.1%)Hz		
Transfer time	AC mode to Bat.mode	0ms		
	Inverter to Bypass	0ms		
Output waveform		Pure Sinewave		
Crest factor		3:1		
Harmonic distortion (THDv)		≤2% Linear load ≤5% Non linear load		
Overload	AC mode	Load≤110%: last 60min turn to bypass; ≤125%: last 10min turn to bypass; ≤150%: last 1min turn to bypass; ≥150%: turn to bypass mode immediately		
	Bat.mode	Load≤110%: last 10min; ≤125%: last 1min; ≥125% shut down UPS immediately		
	Bypass mode	Breaker 2 × 32A	Breaker 2 × 50A	Breaker 2 × 63A

### EFFICIENCY

Efficiency	Up to 93.5%			Up to 94%		
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### BATTERY

Battery voltage	Standard unit	Chassis 1: $\pm 120\text{Vdc}$ (20pcs 9Ah) (20pcs 7Ah, 2 $\times$ 20pcs 7/9Ah optional)	$\pm 120\text{Vdc}$ (2 $\times$ 20pcs 9Ah) (2 $\times$ 20pcs 7Ah optional)				
		Chassis 2: $\pm 96\text{Vdc}$ (16pcs 9Ah) or $\pm 120\text{Vdc}$ (20pcs 7/9Ah) optional					
	Long run unit	$\pm 96\text{Vdc} \sim \pm 120\text{Vdc}$ (16 $\sim$ 20pcs, 16pcs default, standard unit and 20pcs no power derating; 20pcs output power factor 0.9, 18pcs output power factor 0.8; 16pcs output power factor 0.7)					
Charging current		14A (Max.)	1.35A (2.7A optional)	16A (Max.)	2.7A	18A (Max.)	2.7A
		Charging current can be set according to battery capacity					

### PHYSICAL

Dimension (W × D × H)	Standard unit	Chassis 1: 250 × 900 × 868mm	250 × 900 × 868mm	
		Chassis 2: 250 × 645 × 715mm		
	Long run unit	220 × 531 × 450mm		
Net weight	Standard unit	Chassis 1: 114kg (20pcs 9Ah)	167kg (2 × 20pcs 9Ah)	171kg (2 × 20pcs 9Ah)
		Chassis 2: 87kg (20pcs 9Ah)		
	Long run unit	22kg	24kg	28kg

### ENVIRONMENTAL

Operating temperature	0°C ~ 40°C					
Storage temperature	- 25°C ~ 55°C					
Humidity range	0 ~ 95% (Non condensing)					
Altitude	< 1500m, derating required when > 1500m					
Noise level	< 55dB at 1 Meter			< 58dB at 1 Meter		

### STANDARDS

Safety	IEC/EN 62040-1, IEC/EN 62477-1					
EMC	IEC/EN 62040-2 (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, IEC 61000-2-2)					

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

## MP BT 10–20kVA battery pack specification

MODEL	MP31 BT40120N
<b>BATTERY SYSTEM</b>	
Battery type	VRLA (Lead acid maintenance free battery)
Typical battery recharging time	6 ~ 8 hours (To 90% of full capacity)
Typical battery life	3 ~ 5 years, depend on discharging cycle and ambient temperature
System voltage	± 120Vdc
Battery quantity	2 × 20 PCS
Capacity	7Ah/9Ah (12V)
<b>PHYSICAL</b>	
Dimension (W × D × H)	250 × 619 × 616mm (With wheel)
Net weight	122kg/134kg
<b>ENVIRONMENT</b>	
Safety	CE
Operating environment	0°C ~ 40°C
Relative humidity	0 ~ 95% (Non condensing)
Noise level	< 40dB at 1 Meter

Specifications are subject to change without prior notice.

Remark: MP31 BT40120N "MP31" means series; "BT" means Battery Tower cabinet; "40" means battery number inside the cabinet; "120" means the battery system voltage; "N" means battery with neutral connection.

MODEL	YDC3320 BT80120N
<b>BATTERY SYSTEM</b>	
Battery type	VRLA (Lead acid maintenance free battery)
Typical battery recharging time	6 ~ 8 hours (To 90% of full capacity)
Typical battery life	3 ~ 5 years, depend on discharging cycle and ambient temperature
System voltage	± 120Vdc
Battery quantity	4 × 20 PCS
Capacity	7Ah/9Ah (12V)
<b>PHYSICAL</b>	
Dimension (W × D × H)	250 × 900 × 868mm (With wheel)
Net weight	244kg/265kg
<b>ENVIRONMENT</b>	
Safety	CE
Operating environment	0°C ~ 40°C
Relative humidity	0 ~ 95% (Non condensing)
Noise level	< 40dB at 1 Meter

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3. Remark: YDC3320 BT80120N "YDC3320" means series; "BT" means Battery Tower cabinet; "80" means battery number inside the cabinet; "120" means the battery system voltage; "N" means battery with neutral connection

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