

# Alpha

10kVA ~ 20kVA  
PF1.0 (3:1 / 1:1)



## Features

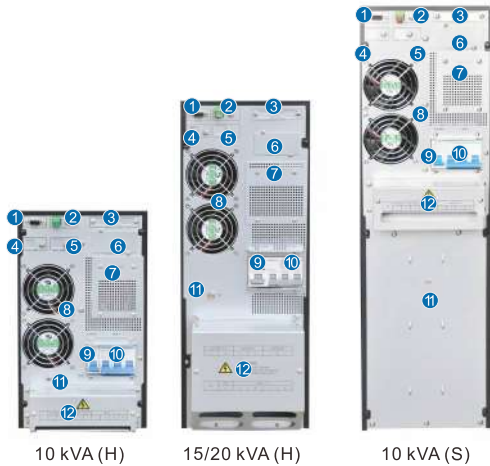
- High frequency on-line double conversion technology
- Advanced DSP and 3-level technology
- Output power factor 1.0
- Active power factor correction (APFC), input power factor up to 0.99
- High efficiency 95% (up to 98% in ECO mode)
- Advanced digital parallel technology
- 3:1 to 1:1 model settable
- Wide input voltage range (190 ~ 499 Vac) and frequency range (40 ~ 70 Hz)
- 50 / 60 Hz frequency auto sensing
- Two modes of frequency conversion: 50 Hz input / 60 Hz output or 60 Hz input / 50 Hz output
- Dual-input design, supporting independent bypass
- Flexible battery configuration (settable 16 - 20 pcs batteries)
- Digitally controlled charger
- High charging current available (Max. 10 A)
- Charging voltage and current configured by demands
- Linear derating in low voltage input reducing battery discharging times, extending the service life of battery
- Intelligent battery management, automatic floating / equalizing charge control, charger dormancy control, increasing battery life by 50%
- Ability to switch on the UPS with batteries
- Fan speed varies intelligently with temperature, reducing noise and extending its service life
- Equipped with self-aging function
- Compact internal layout, miniaturized the complete unit for small footprint
- LCD+LED display, multi-functional keys operation, friendly human-machine interface
- Powerful background software for parameters configuration
- Advanced multi-platform communications: RS232, USB, RS485, SNMP and dry contacts communication interfaces
- Effective software and hardware protection function, robust self-diagnostic function, and abundant event log for check

### Available Options

- RS232 and intelligent card slot included
- Optional parallel function, battery temperature compensation, SNMP card, USB, RS485 card, dry contacts, EMD, and SMS alarms

## Details

1. RS232
2. EPO
3. Parallel Port (optional)
4. USB (optional)
5. Temperature Detection (optional)
6. Intelligent Slot
7. Reserved: for manual bypass or battery breaker or outlets etc.
8. Fans
9. Bypass Breaker
10. Input Breaker
11. GND
12. Terminals and Cover



10 kVA (H)

15/20 kVA (H)

10 kVA (S)

## Technical specifications

MODEL	ALP 10 (3:1)		ALP 15 (3:1)		ALP 20 (3:1)	
Capacity	10 kVA / 10 kW		15 kVA / 15 kW		20 kVA / 20 kW	
INPUT						
Input wiring	Three-phase five-wire (3Φ + N + PE)					
Rated voltage	380 / 400 / 415 Vac					
Voltage range	190 ~ 305 Vac (linear derating between 50% and 100% load); 305 ~ 499 Vac (no derating)					
Rated frequency	50 / 60 Hz (auto-sensing)					
Frequency range	40 ~ 70 Hz					
Power factor	≥ 0.99					
Bypass voltage range	- 40% ~ +15% (settable)					
Total harmonic distortion (THDi)	≤ 5%					
OUTPUT						
Output wiring	Single-phase three-wire (1Φ + N + PE)					
Rated voltage	208 (PF=0.9) / 220 / 230 / 240 Vac					
Voltage regulation	± 1%					
Frequency	Synchronized to bypass in mains mode; 50 / 60 Hz ± 0.1% Hz in battery mode					
Waveform	Sinusoidal					
Power factor	1					
Total harmonic distortion (THDv)	≤ 1% (linear load); ≤ 3% (non-linear load)					
Crest factor	3:1					
Overload	105% ~ 110% for 10 min, 110% ~ 125% for 1 min,126% ~ 150% for 30 s					
BATTERIES						
DC voltage	192 Vdc (192 ~ 240 Vdc settable)					
Number of battery	16 pcs (16 ~ 20 settable)					
Inbuilt battery (standard model)	12 V / 9 Ah×16		/		/	
Charging current	Standard model: 1 A; Long time model: 5 A (default),1 ~ 5 A settable; 10 A (optional)					
Recharge time	Standard model: 90% capacity restored in 8 hours; Long time model: depend on the capacity of battery					
SYSTEM						
Efficiency	≥ 94% at 100% load, max. 95% at 60% load, ≥ 98% in ECO mode					
Transfer time	0 ms					
Protections	Short-circuit, overload, overtemperature, battery low voltage, overvoltage, undervoltage and fan failure					
Max. number of parallel connections	4					
Communications	RS232 (standard), USB / RS485 / dry contacts / SNMP / battery temperature compensation (optional)					
Display	LCD + LED					
OTHERS						
Operating temperature	0°C ~ 40°C					
Storage temperature	-25°C ~ 55°C (without battery)					
Relative humidity	0 ~ 95% (non-condensing)					
Altitude	≤ 1000 m, derating 1% for each additional 100 m					
IP rating	IP 20					
Noise level at 1 m	≤ 58 dB					
Dimensions (W × D × H) (mm)	191 × 495 × 711 (S) 191 × 495 × 350 (H)		191 × 495 × 515 (H)			
Packaged dimensions (W × D × H) (mm)	310 × 685 × 941 (S) 318 × 617 × 475 (H)		285 × 593 × 618 (H)			
Net weight (kg)	64 (S) 18.5 (H)		26.5 (H)			
Gross weight (kg)	72 (S) 20 (H)		28 (H)			

- S means standard model; H means long time model.
- All specifications are subject to change without notice.