

# Alpha

6KVA ~ 10KVA  
PF 1.0 (1:1)



## Features

- 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
- Wide input voltage range (110 ~ 288 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. 12 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
- Settable delayed start time when mains power is restored, reducing the impact on power grid or generator
- 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



6/10 kVA (H)

6/10 kVA (S)

## Technical specifications

| MODEL                                | ALP 6000                                                                                                 | ALP 10000                                |
|--------------------------------------|----------------------------------------------------------------------------------------------------------|------------------------------------------|
| Capacity                             | 6 kVA / 6 kW                                                                                             | 10 kVA / 10 kW                           |
| <b>INPUT</b>                         |                                                                                                          |                                          |
| Input wiring                         | Single-phase three-wire (1Φ + N + PE)                                                                    |                                          |
| Rated voltage                        | 208 / 220 / 230 / 240 Vac                                                                                |                                          |
| Voltage range                        | 110 ~ 176 Vac (linear derating between 50% and 100% load);<br>176 ~ 288 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%                                                                                                     |                                          |
| <b>OUTPUT</b>                        |                                                                                                          |                                          |
| 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); ≤ 4% (non-linear load)                                                               |                                          |
| Crest factor                         | 3:1                                                                                                      |                                          |
| Overload                             | 105% ~ 110% for 10 min, 110% ~ 125% for 1 min, 126% ~ 150% for 30 s                                      |                                          |
| <b>BATTERIES</b>                     |                                                                                                          |                                          |
| DC voltage                           | 192 Vdc (192 ~ 240 Vdc settable)                                                                         |                                          |
| Number of battery                    | 16 pcs (16 ~ 20 settable)                                                                                |                                          |
| Inbuilt battery (standard model)     | 12 V / 7 Ah × 16                                                                                         | 12 V / 9 Ah×16                           |
| Backup time (typical load + 50%)     | ≥ 10 min                                                                                                 |                                          |
| Backup time (maximum load)           | ≥ 5 min                                                                                                  |                                          |
| Charging current                     | Standard model: 1 A; Long time model: 5 A (default), 1 ~ 5 A settable, 12 A (optional)                   |                                          |
| Recharge time                        | Standard model: 90% capacity restored in 8 hours;<br>Long time model: depend on the capacity of battery  |                                          |
| <b>SYSTEM</b>                        |                                                                                                          |                                          |
| 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                                                                                                |                                          |
| <b>OTHERS</b>                        |                                                                                                          |                                          |
| 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                   | ≤ 55 dB                                                                                                  | ≤ 58 dB                                  |
| Dimensions (W × D × H) (mm)          | 191 × 465 × 711 (S), 191 × 465 × 350 (H)                                                                 | 191 × 495 × 711 (S), 191 × 495 × 350 (H) |
| Packaged dimensions (W × D × H) (mm) | 310 × 654 × 941 (S), 318 × 595 × 475 (H)                                                                 | 310 × 685 × 941 (S), 318 × 617 × 475 (H) |
| Net weight (kg)                      | 53 (S), 14.5 (H)                                                                                         | 62 (S), 15.5 (H)                         |
| Gross weight (kg)                    | 61 (S), 16 (H)                                                                                           | 70 (S), 18 (H)                           |

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