# **EA900 G4**

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



#### 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
- 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 logs for check

#### **Available Options**

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

### Rear Panel

- 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)







10 kVA(S)

## **Specifications**

| MODEL                                   | EA9010 (3:1)   | EA9015 (3:1)                      | EA9020 (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);<br>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                           | Sii  | ngle-phase three-wire (1Φ + N + P | E)                                      |  |
| 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                               |  |                                   | 7.00 7.00 7.00 7.00 7.00 7.00 7.00 7.00 |  |
| DC voltage                              | 102 V/do (102 -: 240 V/do cottoble)  |                                   |   |  |
| Number of battery                       | 192 Vdc (192 ~ 240 Vdc settable)   |                                   |   |  |
| Inbuilt battery (standard model)        | 16 pcs (16 ~ 20 settable)  12 V / 9 Ah×16 / /  |                                   |   |  |
| Charging current                        | Standard model: 1 A; Long time model: 5 A (default) ,1 ~ 5 A settable; 10 A (optional)   |                                   |   |  |
| Charging carrent                        | Standard model: 1A; Long time model: 5 A (default), 1 ~ 5 A settable; 10 A (optional)  Standard model: 90% capacity restored in 8 hours; |                                   |   |  |
| Recharge time                           | Long time model: 90% capacity restored in a nours;   |                                   |   |  |
| 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)<br>191 × 495 × 350 (H)   |                                   | × 515 (H)                               |  |
| Packaged dimensions<br>(W × D × H) (mm) | 310 × 685 × 941 (S)<br>318 × 617 × 475 (H)   | 285 × 593 × 618 (H)               |   |  |
| Net weight (kg)                         | 64 (S), 18.5 (H)   | 26.5                              | 5 (H)                                   |  |
| Gross weight (kg)                       | 72 (S), 20 (H)   | 28                                | . ,                                     |  |

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