

# EA990RT G5

10 kVA ~ 60 kVA  
(3:3)  
PF 1.0

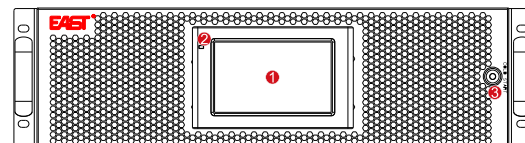


## Features

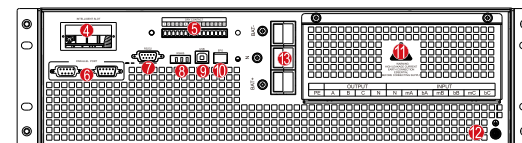
- High frequency on-line double conversion technology
- Advanced dual-core DSP control technology and 3-level technology
- Active power factor correction (APFC), input power factor up to 0.99
- System efficiency is improved to 96%, energy saving rate is doubled
- Output power factor 1.0
- Dual input design, supporting independent bypass
- Advanced digital and parallel technology, providing higher reliability than single system
- Wide input voltage range
- 50 / 60 Hz auto-sensing frequency
- 50 / 60 Hz frequency conversion mode
- Work efficiency up to 98% in ECO mode
- Fan speed varies intelligently with load, reducing noise and extending its service life
- Conformal coating technology to make UPS operate in harsh environment for a long time
- Flexible battery configuration setting, selectable battery numbers: 32~ 40 pcs
- Digitally controlled charger (Max.20 A)
- Ability to switch on the UPS by battery in the absence of mains power (Cold start)
- Zero switching time for UPS power supply mode when the mains power is unstable, ensuring the output is uninterrupted
- Compact internal layout, small footprint
- 5 inches LCD colorful touch screen, friendly human & machine interface
- Powerful background software for parameters configuration and online upgrade
- Advanced multi-platform communication for UPS monitoring: RS232, USB, RS485, dry contacts, SNMP card, Wi-Fi card and GPRS card
- Linear derating in low voltage input, reducing battery discharging times, extending the service life of battery
- Intelligent battery management, automatic equalized and float charging control, charger dormancy control, improving the reliability of charger and extending the battery life
- Effective hardware and software protection, robust self-diagnosis function, abundant event logs for future check
- Standard RS232, USB, RS485, EPO, Dry contacts, Parallel port
- Optional SNMP card, WI-FI card, GPRS card, SMS alarms

## Rear Panel

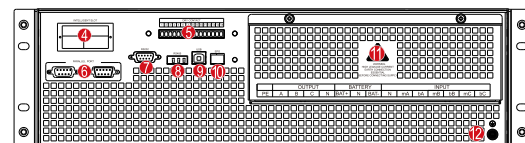
1. The touch screen LCD
2. LED
3. Battery start button
4. SNMP card (optional)
5. Dry contacts
6. Parallel port
7. RS232
8. RS485
9. USB
10. EPO
11. Terminal block
12. GND
13. Battery connectors for 30kVA



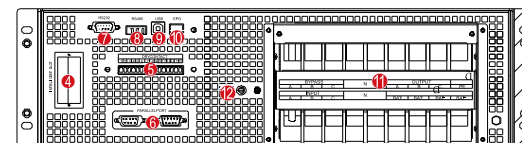
10-60kVA front appearance



30kVA back appearance



10-20kVA back appearance



40-60kVA back appearance

## Specifications

| MODEL                                | EA9910RT  | EA9915RT       | EA9920RT        | EA9930RT       | EA9940RT        | EA9960RT       |
|--------------------------------------|---|----------------|-----------------|----------------|-----------------|----------------|
| Capacity                             | 10 kVA / 10 kW  | 15 kVA / 15 kW | 20 kVA / 20 kW  | 30 kVA / 30 kW | 40 kVA / 40 kW  | 60 kVA / 60 kW |
| <b>INPUT</b>                         |   |                |                 |                |                 |                |
| Rated voltage                        | 380 / 400 / 415 Vac (3Φ + N + PE)   |                |                 |                |                 |                |
| Voltage range                        | 304~478 Vac, full load<br>228V~304 Vac, load decrease linearly according to the min phase voltage                         |                |                 |                |                 |                |
| Rated frequency                      | 50 / 60 Hz (auto-sensing)   |                |                 |                |                 |                |
| Frequency range                      | 40 ~ 70 Hz  |                |                 |                |                 |                |
| Power factor                         | > 0.99  |                |                 |                |                 |                |
| Bypass voltage range                 | Selectable, default ~ 20% ~ +15%<br>Up limited: +10%, +15%, +20%, +25%; Down limited: -10%, -15%, -20%, -30%, -40%        |                |                 |                |                 |                |
| Bypass frequency range               | Selectable, ±1Hz, ±3Hz, ±5Hz  |                |                 |                |                 |                |
| Total harmonic distortion (THDi)     | <3% (full linear load)  |                |                 |                |                 |                |
| Bypass overload                      | 125%: long term operation; 125%~130%: 10min; 130%~150%: 1min;<br>150%~400%: 1s; >400%, less than 200ms                    |                |                 |                |                 |                |
| <b>OUTPUT</b>                        |   |                |                 |                |                 |                |
| Rated voltage                        | 380 / 400 / 415 Vac (3Φ + N + PE)   |                |                 |                |                 |                |
| Voltage regulation                   | ±1% (full linear load)  |                |                 |                |                 |                |
| Frequency                            | Synchronized with utility in mains mode, 50/60 Hz ±0.1% in battery mode   |                |                 |                |                 |                |
| Waveform                             | Sinusoidal  |                |                 |                |                 |                |
| Power factor                         | 1   |                |                 |                |                 |                |
| Total harmonic distortion (THDv)     | <1% (full linear load), <3% (full non-linear load according to IEC / EN62040-3)   |                |                 |                |                 |                |
| Crest factor                         | 3:1   |                |                 |                |                 |                |
| Overload                             | <110%, 60min; 110%~125%, 10min; 125%~150%, 1min; >150%, 200ms   |                |                 |                |                 |                |
| <b>BATTERIES</b>                     |   |                |                 |                |                 |                |
| DC voltage                           | ±240VDC (selectable, 32 - 40pcs)  |                |                 |                |                 |                |
| Charging current                     | 10A Max.  |                |                 | 15 A           |                 | 20 A           |
| Charger voltage precision            | 1%  |                |                 |                |                 |                |
| Recharge time                        | Long time model: depend on the capacity of battery  |                |                 |                |                 |                |
| <b>SYSTEM</b>                        |   |                |                 |                |                 |                |
| Efficiency                           | 95% Max.  |                |                 | 96% Max.       |                 |                |
| Transfer time                        | 0 ms  |                |                 |                |                 |                |
| Max. number of parallel connections  | 4   |                |                 |                |                 |                |
| Protections                          | Short-circuit, overload, overtemperature, battery low voltage, overvoltage, undervoltage and fan failure                  |                |                 |                |                 |                |
| Communications                       | RS232, USB, RS485, EPO, Dry contacts, Parallel port (Standard)<br>SNMP card, WI-FI card, GPRS card, SMS alarms (Optional) |                |                 |                |                 |                |
| Display                              | LED + 5 inches LCD touch screen   |                |                 |                |                 |                |
| <b>OTHERS</b>                        |   |                |                 |                |                 |                |
| Operating temperature                | 0°C ~ 40°C  |                |                 |                |                 |                |
| Storage temperature                  | -40°C ~ 70°C  |                |                 |                |                 |                |
| Relative humidity                    | 0 ~ 95% (Non-condensing)  |                |                 |                |                 |                |
| Altitude                             | <1000m, load derated 1% per 100m from 1000 ~ 2000m  |                |                 |                |                 |                |
| IP rating                            | IP 20   |                |                 |                |                 |                |
| Noise level at 1 m                   | <60dB   |                |                 | <65dB          |                 |                |
| Dimensions (W × D × H) (mm)          | 440 x 660 x 130   |                | 440 x 750 x 130 |                | 440 x 730 x 130 |                |
| Packaged dimensions (W × D × H) (mm) | 532 x 800 x 204   |                | 532 x 890 x 204 |                | 535 x 865 x 226 |                |
| Net weight (kg)                      | 22  |                | 24              |                | 29              |                |
| Gross weight (kg)                    | 24  |                | 26              |                | 31              |                |

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

• Custom-made specifications are acceptable.