

# SMARTXL

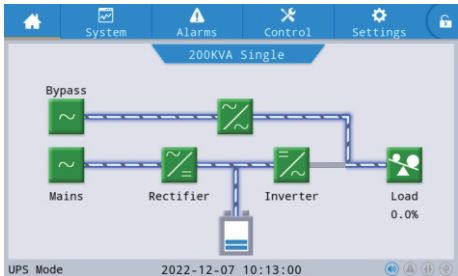
160 kVA ~ 500 kVA  
PF 0.9  
IGBT Rectifier



EA890i series is an on-line dual-conversion industrial UPS based on EA890 platform, which is designed based on our years of experience in the application of power electronic products in highways, tunneling, manufacturing and electric power etc. This series of products adopts IGBT rectifier + built-in isolation transformer scheme, which has superior electrical safety performance and high system availability, and can provide stable and reliable power supply guarantee for the industries of finance, transportation, telecommunication, and manufacturing.

### Features

- Online Double Conversion Topology, accept Dual- Mains Input
- DSP Technology Guarantees High Reliability
- Input and output are completely isolated for great security
- True Inbuilt Galvanic Isolation Transformer Design, DZn0 winding transformer compatible with unbalanced load
- Strong mixed load capacity and high overload capacity
- Redundant Fan Design and Independent Ventilation Enhances Durable Operation Under Harsh Environment
- Intelligent self- diagnosing function, superior failure protection, large capability of history records storage
- High efficiency even at light loads
- Adjustable Battery Numbers
- Intelligent Battery Management to Prolong Battery Life Cycle
- N+X Redundancy Parallel Operation with up to 6 Units (Option)
- Variety of Communication Options Available
- EPO & ECO Mode Operation
- Generator compatible
- High MTBF (> 200,000 h)
- Low MTTR (<0.5 h)



7" Touch Screen

### Specifications

| MODEL                               | SMARTXL160   | SMARTXL200         | SMARTXL250       | SMARTXL300       | SMARTXL400              | SMARTXL500       |
|-------------------------------------|--|--------------------|------------------|------------------|-------------------------|------------------|
| Capacity                            | 160 kVA / 144 kW   | 200 kVA / 180 kW   | 250 kVA / 225 kW | 300 kVA / 270 kW | 400 kVA / 360 kW        | 500 kVA / 450 kW |
| INPUT                               |  |                    |                  |                  |                         |                  |
| Input wiring                        | Three-phase five-wire (3Φ + N + PE)  |                    |                  |                  |                         |                  |
| Rated voltage                       | 380 / 400 / 415 Vac  |                    |                  |                  |                         |                  |
| Voltage range                       | 304 ~ 346 V ( derating 10%), 346 ~ 456 V (full load)   |                    |                  |                  |                         |                  |
| Rated frequency                     | 50 / 60 Hz   |                    |                  |                  |                         |                  |
| Frequency range                     | (50 / 60) ± 5 H z  |                    |                  |                  |                         |                  |
| Power factor                        | ≥ 0.99   |                    |                  |                  |                         |                  |
| Total harmonic distortion (THDi)    | ≤ 3%   |                    |                  |                  |                         |                  |
| Delayed start of rectifier          | 10 s (1 ~ 300 settable)  |                    |                  |                  |                         |                  |
| Bypass voltage range                | ± 20% (settable)   |                    |                  |                  |                         |                  |
| OUTPUT                              |  |                    |                  |                  |                         |                  |
| Output wiring                       | Three-phase five-wire (3Φ + N + PE)  |                    |                  |                  |                         |                  |
| Rated voltage                       | 380 / 400 / 415 Vac  |                    |                  |                  |                         |                  |
| Output voltage regulation           | ± 1%   |                    |                  |                  |                         |                  |
| Output frequency regulation         | 50 / 60 Hz ± 0.1% in battery mode  |                    |                  |                  |                         |                  |
| Waveform                            | Sinusoidal   |                    |                  |                  |                         |                  |
| Power factor                        | 0.9  |                    |                  |                  |                         |                  |
| Voltage distortion (THDv)           | ≤ 2% (linear load), ≤ 5% (non-linear load)   |                    |                  |                  |                         |                  |
| Crest factor                        | 3:1  |                    |                  |                  |                         |                  |
| Overload                            | 105% ~ 110% for 60 min, 110% ~ 125% for 10 min, 125% ~ 150% for 1 min, 150% ~ 200% for 200ms   |                    |                  |                  |                         |                  |
| BATTERIES                           |  |                    |                  |                  |                         |                  |
| DC voltage                          | Lead acid battery: 600 Vdc    Lithium iron phosphate battery: 614.4 Vdc  |                    |                  |                  |                         |                  |
| Number of batteries                 | Lead acid battery: 12 V x 50 pcs (48~52 pcs settable)<br>Lead acid battery: 2 V x 300 pcs (288~312 pcs settable)<br>Lithium iron phosphate battery: 3.2 V x 192 pcs (192/208 pcs settable) |                    |                  |                  |                         |                  |
| Charging current                    | Charging rate (settable) × battery capacity (settable) × number of battery groups (settable)   |                    |                  |                  |                         |                  |
| SYSTEM                              |  |                    |                  |                  |                         |                  |
| Efficiency                          | Line mode ≥ 94%,<br>ECO mode ≥ 98%   |                    |                  |                  |                         |                  |
| Max. number of parallel connections | 6  |                    |                  |                  |                         |                  |
| Protections                         | Short-circuit, overload, overtemperature, overvoltage, undervoltage, battery low voltage and fan failure   |                    |                  |                  |                         |                  |
| Communications                      | Standard configuration: RS232, RS485, dry contacts<br>Optional configuration: SNMP card, temperature compensation, SMS alarms  |                    |                  |                  |                         |                  |
| Display                             | 7 inches LCD touch screen  |                    |                  |                  |                         |                  |
| OTHERS                              |  |                    |                  |                  |                         |                  |
| Operating temperature               | 0 ~ 40℃  |                    |                  |                  |                         |                  |
| Storage temperature                 | - 25℃ ~ 55℃ (without battery)  |                    |                  |                  |                         |                  |
| Relative humidity                   | 0% ~ 95% (non-condensing)  |                    |                  |                  |                         |                  |
| Altitude                            | ≤ 1000 m. Above 1000 m, derating 1% for each additional 100 m  |                    |                  |                  |                         |                  |
| IP rating                           | IP 20  |                    |                  |                  |                         |                  |
| Noise level at 1 m                  | < 65 dB  |                    |                  |                  | < 70 dB                 |                  |
| Dimensions (W×D×H) (mm)             | 800 × 860 × 1700   | 1210 × 860 × 1950  |                  |                  | 2380 × 860 × 1950       |                  |
| Packaged dimensions (W×D×H) (mm)    | 900 × 1000 × 1950  | 1300 × 1000 × 2200 |                  |                  | 1300 × 1000 × 2200 (×2) |                  |
| Net weight (kg)                     | 790  | 1135               | 1275             | 1355             | 2090                    | 2300             |
| Gross weight (kg)                   | 840  | 1200               | 1340             | 1420             | 2200                    | 2410             |

- All specifications are subject to change without notice.
- Custom-made specifications are acceptable.
- This product is applicable to industrial, commercial, financial, rail transit and other industries applications, but not available for life support systems.
- For critical systems related to public safety or significant economic benefits, dual power system is required to power the load.