



MAIN FEATURES:

- Advanced DSP and 3-level technology
- Output power factor 0.9
- 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 - 478 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%



SPOWER ENERGY UPS REGULATOR INVERTOR

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TECHNICAL DATA SHEET FOR SHARK 3PH IN 1 PH OUT SERIES

| MODEL | SHARK 3110 | SHARK 3115 | SHARK 3120 |
|--------------------------------------|--|-----------------|----------------|
| 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 ~ 304 Vac (linear derating between 50% and 100% load); 304 ~ 478 Vac (no derating) | | |
| Rated frequency | Voltage range | | |
| 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 (L-N) | | |
| 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 | 102% ~ 110% for 10 min, 110% ~ 125% for 1 min, 125% ~ 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: 1 A; Long time model: 5 A (default), 1 ~ 5 A settable; 10 A (optional) | | |
| 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) | 440 × 650 × 88 (H) 440 × 660 × 176 (S) | 440 × 780 × 132 | |
| Packaged dimensions (W × D × H) (mm) | 514 × 696 × 168 (H) 554 × 792 × 418 (S) | 554 × 792 × 400 | |
| Net weight (kg) | 17 (H), 67 (S) | 25.5 | |
| Gross weight (kg) | 19 (H), 77 (S) | 28 | |



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