

linear/1

battery backup • line conditioner
surge suppressor

Compliance with universal safety
and EMC standards

- UL 544 (UL 2601 available Fall 2002) medical safety certifications
- FCC part 15: Class A, Vfg 243/1991, Vfg 46/1992, CISPR 22 EMC compliance, UL 1778, CAN/CSA C22.2 No. 107.1-M91

Low current leakage for
"near patient or staff" applications

Less than 100 microamps typical . . . industry safety standards require less than 500 microamps

Efficiency

96% efficient, which may in some applications save you thousands of dollars in energy consumption and AC expenditures

Configurable

- 1.5, 3, 4, 5, and 8kVA/kW industry exclusive offering
- 6.5 to 13 minutes standard at full load (with extended runtime options) battery run times for power loss situations . . . be they planned or not
- 1.5k - 120V input, 120V output
- 3-8k - 200-240V input, 100, 200, 208 or 240V output
- 1 to 4 plug and play panels with multiple receptacles in each

18 internal diagnostic routines

Comprehensive UPS condition alerts: low runtime, overload, circuit breaker warning / shutdown, high ambient temperature, check battery, check inverter, memory error, high battery, low battery advisory condition, check fan, batteries disconnected, tap regulator alarm, low AC out warning / shutdown, high AC out warning / shutdown, check MOVs, auto bypass, check fuse board, check power supply

Unity power factor

No oversizing of UPS is required for power factor corrected loads

System superiority

- Realtime multi-tasking microprocessor control
- Worldwide voltage and frequency compatibility
- Lowest operating cost in its power range
- 40 decibel at one meter audible noise (5 times softer than other offerings)
- Easy installation





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| Model | U91-3k | U91-4k | U91-5K | U91-8K |
|-------|--------|--------|--------|--------|
|-------|--------|--------|--------|--------|

| Capacity (kVA/kW) | 3kVA/3kW | 4kVA/4kW | 5KVA/5kW | 8kVA/8kW |
|---|---|-------------------|-------------------|-------------------|
| Dimensions: H x W x D (inches) | 29 x 10.5 x 25.75 | 29 x 10.5 x 25.75 | 29 x 10.5 x 25.75 | 29 x 10.5 x 25.75 |
| □ □ □ (mm) | 737 x 267 x 654 | 737 x 267 x 654 | 737 x 267 x 654 | 737 x 267 x 654 |
| Weight □ □ □ (lb) | 280 | 280 | 295 | 490 |
| □ □ □ (kg) | 127 | 127 | 134 | 222 |
| Input Connection | Hardwired input is standard (line cord options available - contact factory) | | | Hardwired Input |
| Output Connection | Hardwired output is standard (receptacle options available - contact factory) | | | |
| Typical Runtime: □ □ □ (Full '100%' Load) | 13 | 9 | 6.5 | 11 |
| (minutes) □ □ □ (80% Load) | 18 | 12 | 9 | 14 |
| □ □ □ (half Load) | 35 | 24 | 18 | 25 |
| AC Input Voltage Range | 147-264 (for nominal 200/208/220/230/240V output) | | | |
| Input Nominal Current | 200V=17A | 200V=22A | 200V=28A | 200V=45A |
| at Full Load | 208V=17A | 208V=22A | 208V=27A | 208V=43A |
| | 120V=16A | 220V=20A | 120V=25A | 120V=41A |
| | 230V=15A | 230V=20A | 230V=24A | 230V=39A |
| | 240V=14A | 240V=19A | 240V=23A | 240V=38A |
| Operating Frequency | 50 or 60Hz nominal | | | |
| | On line: output frequency tracks input within adjustable limits (±3Hz default) | | | |
| | On inverter: ±0.15Hz | | | |
| Nominal Output | 200/208/220/230/240 nominal output voltage | | | |
| Output Voltage Regulation | ±5% of nominal output voltage | | | |
| Output Voltage Waveform | Sinewave, computer-grace power with 5% THD at rated kW load | | | |
| Overload Capacity | 200% Surge | | | |
| Transfer Time | 0 mS | | | |
| Lightning, Surge and Noise Protection | 200 Joule surge suppression rating. 0.7% Let-Through Voltage (LTV). Tested to ANSI/IEEE C62.41 Categories A3 and B3 tests. Common Mode - up to 50dB. Normal Mode - up to 90dB | | | |
| | Separately derived power source per NEC Article 250-5d. | | | |
| Efficiency (on line) | 95% | 96% | 96% | 96% |
| Recharge Time (to 85% charge) | 2-3 hours | 2-3 hours | 2-3 hours | 3-4 hours |
| Safety Certification | UL 544, UL 2601, UL 1778, cUL | | | |
| EMC Compliance | FCC-A, Vfg 243/1991, Vfg 46/1992, CISPR 22 | | | |
| Testing Standards | ANSI/IEEE C62.41 (1980), C62.45 (1987); IEC 801-2, 801-3, 801-4, 801-5 | | | |
| Communication | RS-232 port (DE9) featuring full-duplex serial communication, alarm contacts, inverter contacts, and remote shutdown | | | |
| Operation | | | | |
| Operating Temperature | 0 degrees to +40 degrees C. | | | |
| Storage Temperature | -20 degrees to +60 degrees C (-20 degrees to +40 degrees C if battery is not removed) | | | |
| Relative Humidity | 0 to 95% without condensation | | | |
| Audible Noise at 1m | <40dBA | <40dBA | <40dBA | <40dBA |
| Heat (on line): □ □ □ (BTU/hr.) | 539 | 569 | 711 | 1138 |
| □ □ □ (kW/hr.) | 0.158 | 0.167 | 0.208 | 0.333 |
| Altitude | Maximum ambient operating temperature drops by 1 degree C per 305 meters (1000 feet) above sea level, the maximum elevation being 3050 meters (10,000 feet). | | | |



All specifications subject to change without notice