

MINI HARSH ENVIRONMENT UPS (PBC I)

FOR INDOOR AND OUTDOOR APPLICATIONS

STADIUM, GYMNASIUM, AMPHITHEATER, CONVENTION CENTER, PARKING STRUCTURE, EMERGENCY AND SECURITY LIGHTS, TELECOMMUNICATION, MILITARY, INLAND NON-CONTROL ENVIRONMENT, OCEAN FRONT BATTERY BACKUP SYSTEM, DUSTY AND UNCONTROLLED ENVIRONMENTS



MINI HE MODELS (100-1400 W)

- **UL1778 and CAN/CSA C22.2 No107.1-95**
- **Tested and Certified to Bellcore**
- **Operation Temp. (-40 to 58°C.)**
- **Provide power conditioning and transient filtering**
- **Uninterrupted, $\pm 0.5\%$ voltage regulated, continuous sinewave out for use with “normally on” lighting fixtures and exit lamps**
- **Shock and Vibration:** GR-63-CORE ISSUE 1 section 4.3
- **Vibration and Earthquake:** GR-63-CORE ISSUE 1 section 4.4
- **Salt and Fog:** Per GR-487-core R3-165
- **TVSS (Transient Voltage Surge Suppression)**
 - AC power connections to the battery backup systems are protected from lightning and electrical surges in accordance with ANSI C62.41-1991 category C3 and UL1449 second edition.
 - Grounding is in accordance with Article 250 of the National Electrical Code (ANSI/ NFPA70), and Section 10 of the Canadian Electrical Code Part I (CSA C22.1-94).
- **Electromagnetic Compatibility (EMC):** FCC Part 15 Subpart J-Class B, Bellcore TA 1089, EN 55022 (1991)/CISPR 22 Class A
- **Reliability**
 - The predicted Mean Time Between Failures (MTBF) of unit is exceeding 86,000 hours at full power output.
 - The products all comply with the requirements of Bellcore document TY-TSY-000357, Issue 1, December 1987, “Component Reliability Assurance Requirements for Telecommunications Equipment”.
- **ESD:** Meets all ESD requirements specified in Bellcore GR-1089-CORE, Issue 1A, July 1996.
- **Cabinet:** The Unit is designed and tested to the NEMA 12 environmental standard. The enclosures are designed for indoor unconditioned or outdoor unprotected use compliant with applicable sections of Bellcore GR-487-CORE, Issue 1, October, 1995.
 - Bellcore Rain intrusion test performed in addition to UL 50 tests.



NEMA 3R for Indoor Standard (LU0.4XXX, LU1.5XXX) painted Steel cabinet, Stainless option



NEMA 4 for Outdoor Standard (LU0.7XXX) painted Steel cabinet, Stainless option

MINI HARSH ENVIRONMENT SPECIFICATIONS

INPUT SPECIFICATIONS

Nominal Input Voltage: 120, 220, 240, or 277 VAC single phase

Input Voltage Range: -20% to +15%

Input Frequency: 60 or 50 Hz, $\pm 5\%$

Overcurrent Protection: Circuit breaker

Power Connection: Hard wired (TB)

Input Configuration: 2 wire plus ground

ENVIRONMENT

Operating Temperature: -40°C to +58°C

Storage & Transport Temp.: -40°C to +60°C

Operating Relative Humidity: 0 to 100%

Solar Loading:
 $Q_s = 70 \text{ W/ft}^2$

Operating Altitude: -1000 to +13,000 feet, referenced to sea level. Temperature Compensated Battery Charger

OUTPUT SPECIFICATIONS

Output Voltage: Same voltage as Input or Multiple Output 120/240, 120/208 or 120/277 VAC

Voltage Regulation: $\pm 0.5\%$ (LU)

Frequency: 60 Hz ± 0.5 Hz, or 50 Hz $\pm 5\%$

Harmonic Distortion: $< 5\%$ THD; $< 3\%$ Single Harmonic

Crest Factor: 3 to 1

Power Factor: 0.7 leading load to 1.0 P.F.

Noise Rejection: -120 dB common mode; -60 dB normal mode

Battery Back-up Times: Range from 2 min to 13 hrs. Consult Factory for longer backup time.


PHYSICAL SPECIFICATIONS


Mounting: Pad Mount, Pole Mount Provision

Accessibility: All servicing is through the front; no side or back required, and Cable Entry from Bottom or Side (Nema 3R or 4 Cabinets)

OPTIONS

- Pole Mounting Provision
- Battery Heating Pad
- Extended Warranty and Service Plans
- Lifting Eyes NEMA 3R and 4
- Monitoring via RS232 and RS485
- Secondary Auxiliary Output Circuit Breakers
 - LU0.4XXX, LU0.7XXX, LU1.5XXX models: Main or max. 4 total
- Spare Part Kits Available
- Door Intrusion Alarm Contacts
- Certified Zone 4 Seismic Bracket

NEMA 3R Cabinet	Model No	Max. Watts	**Backup time Range	**Qty.) Battery	Cabinet Size	Inverter Weights w/o Battery***
	LU0.4XXX	100	30min - 4hrs	(4) 12V 48VDC	19.5" Wide 23" High 21" Deep	150 lbs
		200	30min - 2hrs			150 lbs
		400	30min - 4hrs			165 lbs
	LU1.5XXX	500	30min - 3hrs	(6) 12V 72VDC		220 lbs
		600	30min - 3hrs			240 lbs
		700	30min - 2hrs			240 lbs
		1000	15 - 60 min			260 lbs
		1300	15 - 60 min			260 lbs
		1400	15 - 30 min			260 lbs

*NEMA 4 Cabinets	Model No	Max. Watts	**Backup time Range	**Qty.) Battery	Cabinet Size	Inverter Weights w/o Battery***
	LU0.7XXX	100	30min - 11hrs	(6) 12V 72VDC	19.5" Wide 23" High 21" Deep	200 lbs
		200	30min - 9hrs			200 lbs
		400	30min - 4hrs			220 lbs
		500	30min - 3hrs			240 lbs
		600	30min - 2hrs			240 lbs
		700	30min - 2hrs			240 lbs

* 4 cabinet can be used for 3R cabinet.

** Internal batteries. Longer backup times available with external battery cabinets.

***Battery tray weight varies by model and is proximally 200 to 290 lbs and installed in the same cabinet. For other backup times, consult factory.

Specifications are subject to change without prior notification.

