

Central Lighting Inverter for Outdoor/Hostile Environments

Built like a tank, the HEU is specifically designed for outdoor locations and hostile environments. This unit has been proven for several years in the field to operate efficiently in extreme temperatures, harsh weather conditions, and withstand physical abuse and vandalism. Unique in the market, the HEU is the only outdoor central lighting inverter listed to UL924 and UL1778 UPS standards. The HEU is the solution to fulfill power requirements for emergency egress lighting in a wide variety of very challenging applications.

Key Features of the HEU

- Electronics maintain normal output when tested to 136°F (58°C) and minus -29°F (-34°C) temperatures.
- Designed for remote locations where input voltage can swing from +20% to -35%.
- Latest technology microprocessor controlled electronics with PWM (Pulse Width Modulated) design for true Sine Wave output.
- Double Conversion, “no-break” online system powers all lamp types, including LED.
- Continuous self-diagnostic and self-testing system. Automatically tests every 30 days and 12 months. Optional remote monitoring capabilities.
- Heavy-duty NEMA 3R enclosure includes weatherproof gasketing, convection and fan cooling. Optional battery heater.
- Rugged steel (painted) enclosure is standard. Optional aluminum or stainless steel for exceptional corrosion resistance in very harsh environments.
- Tamperproof triple-locking design includes internal steel bars, keylock, and padlocking door handle.



Hostile Environmental Unit (HEU)

Central Lighting Inverter Vandal-proof for Outdoor and Harsh Locations

New Cabinet Size
5.25 - 17 kW

Applications

For outdoor and remote locations, hostile environments, high security, areas subject to vandalism, and buildings where inside space is not available.

Typical installations:

- Parking Garages
- Bridges, Toll Booths, Tunnels
- Sports Stadiums
- Railroads and Subways
- Prisons
- Roof Tops
- Airports, Airplane Hangars
- Military Bases
- Embassies
- Ports and Refineries
- Extremely hot or cold areas
- Homeland Security



Single Phase

2.1 kW to 17 kW Available

(Ask factory for part numbers)

HID, Incandescent, Fluorescent, LED
120, 208, 240, 277, or 480 Volts

Heavy-duty NEMA 3R enclosure in
steel, aluminum, or stainless steel

Single Cabinet:

(2.1-5kW: 39"W x 18"D x 68"H) (5.25-17kW: 51"W x 30.5"D x 70"H)

Listed to UL924 Lighting
and UL1778 UPS Standards, by CSA

A Full Line Power Protection Company.

Hostile Environmental Unit (HEU)

INPUT SPECIFICATIONS

Nominal Input Voltage	120, 208, 240, 277, or 480 VAC single phase
Input Voltage Range	+20% to -35%
Input Frequency	60 Hz \pm 5%
Power Factor	1.0 unity
Overcurrent Protection	Circuit breaker
Power Connection	Hard wired (terminal block)
Input Configuration	2 wire (hot, neutral) plus ground

OUTPUT SPECIFICATION

Output Rating	2.1, 3, 3.5, 5, 5.25, 7, 7.5, 8.75, 10, 10.5, 12.5, 14, 15, and 17kW (Normal Mode/Emergency Mode)
Voltage	120/240, 277, 480 VAC, Single Phase
Voltage Regulation	\pm 3% No Load to Full Load; \pm 3% High Line to Low Line
Frequency	60 Hz \pm 0.25 Hz (When on Inverter)
Waveshape	Sine Wave
Harmonic Distortion	<7% THD; <5% Single Harmonic
Crest Factor	Up to 3 to 1
Power Factor	1.0 unity
Overload Protection	125% for Ten (10) Minutes; 150% Surge Fault Current Limited by Ferroresonant Design
Noise Rejection	-120 dB Common Mode; -60 dB Normal Mode
Operating Temp. (Electronics Only)	Tested for -29°F.(-34°C) to 136°F.(58°C)

PHYSICAL SPECIFICATIONS

Accessibility	All Servicing is through the Front.
Cable Entry	Bottom
Mounting	Four (4) Mounting Holes Provided to Anchor Enclosure to Pedestal

BATTERY SPECIFICATIONS

Battery Run Time	90 min
Battery Type	Sealed, Maintenance-Free, Lead calcium
Nominal DC Link	48 or 120 VDC link
Overcurrent Protection	Circuit Breaker

SAFETY AGENCIES

CSA Listed to UL1778, UL924, NFPA101, NFPA70, NEC, and OSHA

OPTIONS Available

- Battery Heating Pad
- Extended Warranty and Service Plans
- Lifting Eyes NEMA 3R and 4X
- Monitoring via RS232 and RS485
- Duplex 120V Receptacle for Service
- Make before break Maintenance Bypass Switch and Electronic Maintenance Bypass Switch
- TVSS for 208/240 and 277V
- Secondary Auxiliary Output Circuit Breakers (Main or max. 10 total)
- Spare Part Kits Available
- Runtime Up to 13 Hours
- High Isolation Transformer with Harmonic Reduction (up to K-50)
- Heater Strip with Thermostat Control
- (5) Form "C" Contacts Alarms
- Output Distribution Limit
- Stainless Steel, Zinc Anodized Aluminum Cabinets
- **Global Monitoring System LOCAL**
 - Local PC via RS232 and RS485
 - Event logging up to 500

REMOTE

● Dial-up

- Voice (10 event logging), numeric pager
- Voice, data, fax, pager, PC, e-mail, event logging up to 500
- Voice, data, fax, pager, PC, e-mail, and measurement (500 event logging plus graphic)

● Web/SNMP:

- System status, measurement, alarm notification, event logging and password protected configuration.

Consult Factory for more features and choices of remote communication.

KW	Model Numbers	Input	Output	BTUs/HR	WEIGHT (lbs)	(No of Cabinets) & Dimensions W x H x D
2.1	HU3.0A01TLF1-96	120, 208, 240, 277, 480	120, 208, 240, 277, 480	1137	967	(1) 39" x 74.5" x 20"
3	HU3.0R01TLF2-96	120, 208, 240, 277, 480	120, 208, 240, 277, 480	2047	1433	(1) 39" x 74.5" x 20"
3.5	HU5.0A01TLF1-96	120, 208, 240, 277, 480	120, 208, 240, 277, 480	2047	1314	(1) 39" x 74.5" x 20"
5	HU5.0R01TLF2-96	208, 240, 277, 480	120, 208, 240, 277, 480	3033	2047	(1) 39" x 74.5" x 20"
5.25	HU7.5A01TLF1-96	208, 240, 277, 480	120, 208, 240, 277, 480	3033	2150	51" x 70" x 30.5"
7	HU010A01TLF1-96	208, 240, 277, 480	120, 208, 240, 277, 480	3594	2866	51" x 70" x 30.5"
7.5	HU7.5R01TLF2-96	208, 240, 277, 480	120, 208, 240, 277, 480	3594	3070	51" x 70" x 30.5"
8.75	HU12.5R01TLF1-96	208, 240, 277, 480	120, 208, 240, 277, 480	3594	3070	51" x 70" x 30.5"
10	HU010R01TLF2-96	208, 240, 277, 480	120, 208, 240, 277, 480	3594	4094	51" x 70" x 30.5"
10.5	HU015R01TLF1-96	208, 240, 277, 480	120, 208, 240, 277, 480	4194	4299	51" x 70" x 30.5"
12.5	HU12.5R01TLF2-96	208, 240, 277, 480	120, 208, 240, 277, 480	4194	5118	51" x 70" x 30.5"
14	HU020R01TLF1-96	208, 240, 277, 480	120, 208, 240, 277, 480	7188	5732	51" x 70" x 30.5"
15	HU015R01TLF2-96	208, 240, 277, 480	120, 208, 240, 277, 480	4194	6141	51" x 70" x 30.5"
17	HU017R01TLF2-96	208, 240, 277, 480	120, 208, 240, 277, 480	4194	6141	51" x 70" x 30.5"

Normally On and Normally Off Circuits are available at an additional cost. Please consult factory.