

Central Lighting Inverter (kVA) 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 HID.
- Continuous self-diagnostic and self-testing system. 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)

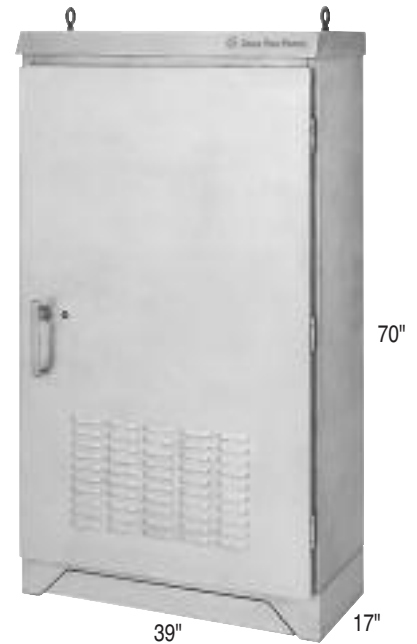
Central Lighting Inverter for Outdoor, Vandal-prone, and Harsh Locations

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



**Product offered
in 0.7 or 1.0 P.F. for VA & KVA**

3 to 20 kVA - Single Phase

**HID, Incandescent, Fluorescent
120, 208, 240, or 277 Volts**

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

**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, or 208, or 240, or 277 VAC single phase
Input Voltage Range	+20% to -35%
Input Frequency	60 Hz \pm 5%
Power Factor	0.7 or 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	3, 5, 7.5, 10, 15, and 20 kVA (3-15 kW available) (Normal Mode/Emergency Mode)
Voltage	120/240, 277 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	0.7 or 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

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.

KVA	Total Watts Max. (.7 POWER FACTOR)	Model Numbers	Input	Output	BTUs/HR	WEIGHT (lbs)	No of Cabinets & Dimensions W x H x D
3	2,100	HU3.0A01TLF1-96	120, 208, 240, 277	120, 208, 240, 277	1137	967	(1) 39" x 74.5" x 20"
5	3,500	HU5.0A01TLF1-96	120, 208, 240, 277	120, 208, 240, 277	2047	1235	(1) 39" x 74.5" x 20"
7.5	5,250	HU7.5A01TLF1-96	208, 240, 277	120, 208, 240, 277	3033	1850	(1) 39" x 74.5" x 20"
10	7,000	HU10A01TLF1-96	208, 240, 277	120, 208, 240, 277	3594	2637	(2) 39" x 74.5" x 20"
15	10,500	HU12.5A01TLF1-96	208, 240, 277	120, 208, 240, 277	4194	3517	(3) 39" x 74.5" x 20"
20	14,000	HU20A01TLF1-96	208, 240, 277	120, 208, 240, 277	7188	3750	(3) 39" x 74.5" x 20"

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



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