

# EXT SERIES

Single Phase, 2.1 to 17kW

parking garages • bridges • toll booths • tunnels  
sports stadiums • railroads • subways • prisons  
roof tops • airports • airplane hangers • military bases  
embassies • ports • reneries • homeland security  
extremely hot or cold areas

EMERGENCY  
LIGHTING  
INVERTERS

HID, Incandescent, Fluorescent, LED  
120, 208, 240, 277, or 480 Volts  
Heavy-duty NEMA 3R enclosure in steel,  
aluminum or stainless steel  
Listed to UL924 Lighting and UL1778 UPS by CSA

## STANDARD FEATURES

- ◆ Back-lit LCD Display for monitoring
- ◆ System pre-wired for optional Global Monitoring System (GMS)
- ◆ Battery Breaker
- ◆ Inverter Test Switch
- ◆ Generator Compatible with Automatic Governor (Slew Rate 2Hz/sec.)
- ◆ Battery Management Software
- ◆ High Frequency PWM with Digital Signal Processing Technology
- ◆ Product Offered 1.0 Power Factor Unity



## EXT SERIES

**ON-LINE //**  
**STAND-BY /FAST TRANSFER**

*Shown Stainless Steel Heavy-duty NEMA 3R*

The EXT Series is specially designed for outdoor locations and hostile environments. This unit has been proven in the field to operate efficiently in extreme temperatures, harsh weather conditions and withstand physical abuse and vandalism. The EXT Series is the solution to fulfill power requirements for emergency egress lighting in a wide variety of very challenging applications.

## KEY FEATURES:

- ◆ Efficiency: 94% Online / 98% Standby / Fast Transfer
- ◆ Continuous self-diagnostic and self-testing system
- ◆ Optional remote monitoring capabilities
- ◆ Latest technology microprocessor controlled electronics with PWM (Pulse Width Modulated) design for true Sine Wave output
- ◆ Heavy-duty NEMA 3R enclosure includes weatherproof gasketing, convection, and fan cooling. Optional battery heater.
- ◆ Rugged steel (painted) enclosure is standard. Optional stainless steel enclosure for exceptional corrosion resistance in very harsh environments
- ◆ Electronics maintain normal output when tested to 136°F (58°C) and -40°F (-40°C) temperatures.
- ◆ Designed for remote locations where input voltage can swing from +20% to -35%
- ◆ Tamperproof triple-locking design includes internal steel bars, keylock and padlocking door handle.

# TECHNICAL SPECIFICATIONS

## EXT SERIES

EMERGENCY  
LIGHTING  
INVERTERS

### INPUT SPECIFICATIONS

Nominal Input Voltage. . . . .	120 or 208 or 240 or 277 or 480 VAC single phase
Input Voltage Range. . . . .	+10% to -15%
Input Frequency. . . . .	60 Hz ±3%
Power Factor. . . . .	1.0 unity
Overcurrent Protection. . . . .	Circuit breaker
Power Connection. . . . .	Hard wired (terminal block)
Input Configuration. . . . .	2 wire (hot, neutral) plus ground

### OUTPUT SPECIFICATIONS

Output Rating. . . . .	2.1 to 17 kW (Normal Mode/Emergency Mode)
Voltage. . . . .	120, 208, 240, 277 VAC Single Phase
Voltage Regulation. . . . .	±3% No Load to Full Load; ±3% High Line to Low Line
Frequency. . . . .	60 Hz ±0.5 Hz or 0.25%
Waveshape. . . . .	Sine Wave
Harmonic Distortion. . . . .	<5% THD; <3% Single Harmonic
Crest Factor. . . . .	3:1 typical
Power Factor. . . . .	1.0 unity
Overload. . . . .	115% for Ten (10) Minutes; 125% Surge
Protection. . . . .	Fault Current Limited by Ferroresonant Design
Noise Rejection. . . . .	-120 dB Common Mode; -60 dB Normal Mode
Operating Temperature. . . . .	Tested for -40°F.(-40°C) to 136°F.(58°C) (Electronics Only)

### 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

- Secondary Auxiliary Circuit Breakers (up to 16 or 24 one-pole OCB's) Normally On, Normally On, Normally Off w/ Delay, Trip Alarm
- Extended Warranty and Service Plans
- Make before break internal Maintenance Bypass switch and Electronic Maintenance Bypass switch
- TVSS for 120, 208, 240 and 277V
- Runtime up to 13 hours
- Rotatable Lifting Brackets
- Fast Transfer
- Battery Thermal Runaway with Dry Contact
- Wireless battery monitoring system: Ability to monitor individual batteries including battery impedance
- High isolation transformer with harmonic reduction (up to K-50)
- Heater strip with thermostat control
- Dry Contacts Normally Open
- Dry Contacts Normally Open and/or Closed
- (5) Form "C" Contacts alarms
- Load Control Relays

#### Global Monitoring System (GMS)

- Provide SNMP MIB to monitor & log UPS status
- Auto-sense 10M/100M Fast Ethernet
- Manage & configure via Telnet, Web Browser or NMS
- Support TCP/IP, UDP, SNMP, TelNet, SNMP, PPP, HTTP, SMTP Protocol
- Sending both of SNMP TRAP and Email for events notifications.
- Auto email daily Battery Backup history report (configurable)
- Basic NetAgent: LAN or WIFI
- Advance NetAgent: LAN, WIFI, Dial-up Modem, or GPRS Modem



KW	INPUT - OUTPUT VOLTAGES	MODEL NUMBERS	DC Voltages	CABINET SIZE (W x H x D)	WEIGHT (LBS)
2.1	120/120 208/208 240/240 277/277 480/277 X / 208, 277, 120/240 Y / 277 & 480	EX3.0A0100N1-VA EX3.0B1300N1-VA EX3.0D0400N1-VA EX3.0R2500N1-VA EX3.0H2500N1-VA EX3.0X5800T1-VA EX3.0Y5899T1-VA	96	40" x 76" x 20"	896
3.0	120/120 208/208 240/240 277/277 480/277 X / 208, 277, 120/240 Y / 277 & 480	EX3.0A0100N1 EX3.0B1300N1 EX3.0D0400N1 EX3.0R2500N1 EX3.0H2500N1 EX3.0X5800T1 EX3.0Y5899T1	96		1066
5.0	120/120 208/208 240/240 277/277 480/277 X / 208, 277, 120/240 Y / 277 & 480	EX5.0A0100N1 EX5.0B1300N1 EX5.0D0400N1 EX5.0R2500N1 EX5.0H2500N1 EX5.0X5800T1 EX5.0Y5899T1	120	52" x 80" x 33.5"	1284
6.0	120/120 208/208 240/240 277/277 480/277 X / 208, 277, 120/240 Y / 277 & 480	EX6.0B1300N1 EX6.0D0400N1 EX6.0R2500N1 EX6.0H2500N1 EX6.0X5800T1 EX6.0Y5899T1	144		1284
8.0	120/120 208/208 240/240 277/277 480/277 X / 208, 277, 120/240 Y / 277 & 480	EX8.0B1300N1 EX8.0D0400N1 EX8.0R2500N1 EX8.0H2500N1 EX8.0X5800T1 EX8.0Y5899T1	192	52" x 80" x 33.5"	1464
10	120/120 208/208 240/240 277/277 480/277 X / 208, 277, 120/240 Y / 277 & 480	EX010B1300N1 EX010D0400N1 EX010R2500N1 EX010H2500N1 EX010X5800T1 EX010Y5899T1	192		2870
12.5	120/120 208/208 240/240 277/277 480/277 X / 208, 277, 120/240 Y / 277 & 480	EX012B1300N1 EX012D0400N1 EX012R2500N1 EX012H2500N1 EX012X5800T1 EX012Y5899T1	192	52" x 80" x 33.5"	3777
15.0	120/120 208/208 240/240 277/277 480/277 X / 208, 277, 120/240 Y / 277 & 480	EX015B1300N1 EX015D0400N1 EX015R2500N1 EX015H2500N1 EX015X5800T1 EX015Y5899T1	240		4512
17.0	120/120 208/208 240/240 277/277 480/277 X / 208, 277, 120/240 Y / 277 & 480	EX017B1300N1 EX017D0400N1 EX017R2500N1 EX017H2500N1 EX017X5800T1 EX017Y5899T1	240	52" x 80" x 33.5"	4512

\* Input Voltage "X": A= 120, B= 208, D= 240, R= 277, H= 480 VAC  
 \* Input Voltage "Y": R= 277 or H= 480 VAC  
 \* Output Voltage "5800" = 120/240, or 280, or 277 VAC  
 \* Output Voltage "5899" = 277 & 480 VAC

All units are 90 minutes battery back-up time at full load.  
 For other back-up times (up to 6 hours), consult factory.  
 Consult factory for 120V and other voltages.

Consult factory for more features and choices of remote communication.  
 Specifications are subject to change without prior notification.



725-DS-01-24