

FAST TRANSFER
EXT OUTDOOR RATING
NEMA 3R
 DRIP TIGHT



MODEL NO: _____
 TYPE: _____
 PROJECT: _____
 COMMENTS: _____

LOAD CAPABILITY
 1750

LOAD TYPES
 All Lighting Load Types

Product Advantages

- **Single-Phase emergency system with exceptional 98% power efficiency**
- **NEMA 3R steel cabinet rated for outdoor installation applications**
- **Fast 2 millisecond transfer time allows for uninterrupted operation of all lighting load types**
- **Provides full light output in the emergency mode**
- **Conducts required monthly and annual tests for operational readiness and logs test, event, and alarm data**

Features

- PWM/MOSFET inverter design delivers high efficiency, low THD, and fast transfer speed
- Micro-processor controlled, temperature compensating charger
- Valve Regulated Lead Acid (VRLA) batteries provide long life and are maintenance free
- Low Battery Voltage Disconnect protects batteries against deep discharge
- Includes Input and Battery Fuse Protection
- Includes red illuminating system status indicator
- Optional touchpad interface and VFD display screen
- Locking NEMA 3R steel cabinet design with white finish
- Temperature-controlled forced air cooling with no filter requirement
- Internal heater capability to extend temperature range to -20° C.
- Meets or exceeds all National Electrical Code and Life Safety Code Emergency Lighting Requirements
- Covered by IOTA's standard 1-Year Warranty on all electronic components and pro-rated warranty on batteries.
- Factory Startup, On-Site Training, and Preventative Maintenance available

DESCRIPTION

The IOTA **IIS EXT 1750** Inverter is a UL Listed single-phase sine wave output inverter designed to provide power to designated emergency lighting fixtures in the event of a loss of normal power. In a power loss situation, the IOTA **IIS EXT 1750** will supply **1750W** of emergency power from the battery supply at **2ms transfer time**. The IOTA **IIS EXT 1750** works in conjunction with any lighting load type and is capable of running normally-on or normally-off designated circuits in the emergency mode. The **IIS EXT 1750** is ideal for providing emergency power to extensive 120V/277V lighting arrangements that utilize multiple lamp and fixture types. The **IIS EXT 1750** conducts monthly and annual tests for operation readiness and logs the test results for reference as needed. The unit features a durable front-access NEMA 3R steel cabinet **suitable for outdoor use** designed for **pole-mount** installation or optional floor mounting. The **IIS EXT 1750** comes with a standard 1-year warranty.

SPECIFICATIONS

| | |
|---------------------------------------|--|
| Input Voltage | 120/208/277VAC Single-Phase |
| Output Voltage | 120/277VAC Single-Phase |
| Frequency | 60Hz* |
| Output Power | 1750W |
| Transfer Time | 2 milliseconds |
| Emergency Operation | 90 minutes |
| Load Power Factor Range | .5 lagging to .5 leading |
| THD (input/output) | <10% / <3% |
| Input Power Walk-in | Limiting inrush current to <125%, 10 times for 1 line cycle |
| Synchronizing Slew Rate | 1Hz per second nominal |
| System Short Circuit | 65 KAIC |
| Static Voltage | +/- 2% (Load current change), +/- 12.5% (Battery discharge) |
| Dynamic Voltage | +/- 2% (+/- 25% load step change) +/- 3% (+/- 50% load step change) recovery within 3 cycles |
| Inverter Overload Threshold | 125% for 12 line cycles, 115% for 10 minutes |
| Crest Factor | 2.8 |
| Operating Temp | 0° to 50° C (with optional** heater: -20° to 50° C) |
| Storage Temp (electronics only) | -20° to 70° C |
| Relative Humidity | < 95% |
| Battery | Maintenance-free Valve Regulated Lead Acid (VRLA) |
| Audible Noise (standby mode) | 45 dba @ 1m |
| Certifications | UL 924 Listed |

*Input +/- 3%, Output in emergency +/- 0.05Hz
 **Internal heater requires separate feed if utilized.



IIS EXT INVERTERS

IIS EXT 1750

1750W OUTDOOR INVERTER SYSTEMS

ORDERING GUIDE

MODEL NAME

| | | |
|---|----------------------|----------------------|
| Output Wattage ¹ | AC Input | AC Output |
| <input type="text" value="IIS"/> <input type="text" value="EXT"/> <input type="text" value="1750"/> | <input type="text"/> | <input type="text"/> |
| | 120IN | 120OUT |
| | 208IN | 120OUT |
| | 277IN | 120OUT |
| | | 277OUT |

ADDITIONAL OPTIONS

Check any that apply

- [blank] - none
- FLRMOUNT** - Floor or pad mount base
- KEYPAD** - Keypad and Display Panel²
- HEATER** - Battery Heater for Additional Temperature Protection⁶
- EO** - Emergency Override
- FSREG*** - Factory Start Up⁴, (*) is the assigned installation zone (1-18)
- TREG(#)** - On Site Training⁵, (#) is the assigned installation zone (1-18)
- PM(A or B)5REG(#)** - 5-Year Preventative Maintenance⁵, (A) for annual plan, (B) for bi-annual plan, (#) is the assigned installation zone (1-18)
- BATINST** - Battery Installation by Factory Certified Technician⁵
- 5YR** - Extended Five-Year Warranty⁶

Example Model: IIS EXT 1750 120IN 120OUT E120

¹ Derate for applications >10,000 ft. elevation

² Used for system setup and status. One recommended per site.

³ Requires 120VAC feed from control switch. Provides the ability to enable emergency output for typically unoccupied venues only when emergency egress is required.

⁴ Includes Extended Two-Year Warranty. Lift may be required during factory start up (not provided)

⁵ Requires Factory Start Up option.

⁶ Provides additional UL Listed operation to -20°C.

DIMENSIONS / WEIGHT

| Inverter Model | Width/Height/Depth (inches) | Electronics Weight | Battery Weight | Total Combined Weight (Electronics, Batteries) |
|----------------|-----------------------------|--------------------|----------------|--|
| IIS 1750 | 19" x 50.75" x 14.375" | 280 lbs | 316 lbs | 596 lbs |

RECOMMENDED ACCESSORIES

These ALCR items are ordered separately to be used in conjunction with the loads connected to the IIS inverter supply. ALCRs eliminate the power consumption from 24/7 "Always On" fixtures while enabling occupants to regain local fixture control without impacting required emergency performance.

ETS DR

The ETS DR is a fixture-level ALCR that shunts power around local controls, allowing the inverter supply to operate the fixture regardless of ON/OFF control setting. Includes the DR dimming relay to also bypass any present 0-10V dimming signal, forcing the fixture to operate at full brightness.

ETS 20

Circuit-level ALCR that shunts power around the local control operating multiple fixtures on a designated circuit, allowing the inverter supply to operate the fixture regardless of ON/OFF control setting.

ETS 20 DR

Same ALCR function as the ETS 20. Includes dual dimming relay for bypassing up to two different 0-10V dimming signals, forcing the fixtures to operate at full brightness.

Warranty: 1-Year Limited Warranty

Complete warranty terms located at www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx