MONARCH SERIES

Freight Allowed: $400.00 or more

UL 924 LISTED

- **Thermoplastic L.E.D. exit sign**
- **UL 924 Listed**
- **Nicad Battery**
- **Dual input - 120/277 VAC**
- **Universal mounting**
- **Single/Double face**
- **UL listed for damp location**
- **AC only or battery back-up**
- **Red or green letters**

MON-X-AC-R

MON-X-AC-G

MON-X-SP-R

MON-X-SP-G

- **Thermoplastic combination**
- **UL 924 Listed**
- **Lead-calcium Battery**
- **Dual input - 120/277 VAC**
- **Universal mounting**
- **Remote capable for two heads**
- **UL listed for damp location**
- **Red or green letters**

MON-COM-R

MON-COM-R-RC

MON-COM-G

MON-COM-G-RC

- **Thermoplastic emergency light**
- **UL 924 Listed**
- **Lead-calcium Battery**
- **Dual input - 120/277 VAC**
- **Impact resistant**
- **UL Listed for damp location**
- **Low voltage disconnect**
- **Fully automatic, solid state charger**

MON-EMER

329 Otter Street, Bristol, PA 19007 • Tele: (215) 788-8870 • Fax: (215) 788-8873

ISI

ISI - MINI

STANDARD TRANSFER CENTRAL INVERTER and DC BACKUP POWER SUPPLY COMBINATION UNIT

Single-Phase power system for incandescent, fluorescent and low voltage emergency lighting.

- Pure sine wave AC Power
- 12 or 24 volt DC output
- 300/400 Watts DC power
- 300/400 VAC power
- 400 Watts AC and DC power combined
- ETL listed to U.L. 924 Standards
- High efficiency
- High power factor
- Compact, wall mounting
- Maintenance free sealed batteries
- Push button test switch and LED indicators
- 3 outputs: 2 DC and 1 AC
- Short or open on any one output does not effect the other two
- DC output fuse indication
- One year warranty, two year optional

FEATURES

Combo Unit: *Combination Unit capable of supplying 400 watts DC, 400 VAC or 400 watts of AC and DC power combined*

Power Protection: *All inverter units come with over and under voltage protection, over load protection, short circuit protection and reverse polarity protection.*

Simple and Easy Installation: *There is no special wiring required. Just connect the unit to either 120 or 277 volt incoming supply on the primary side and snap the male and female battery connector together and you are ready to go.*

Reduced Maintenance and Service cost: *Having an inverter and DC power in one unit allows you to install either low voltage emergency or standard fluorescent lights on the same unit thus eliminating the need for maintaining or testing each unit separately.*

Pedestal Mounting: *A pedestal mount places the unit near the equipment that needs to be supplied with emergency power.*

All specifications subject to change without notice.

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ISI

ISI - MINI

STANDARD TRANSFER CENTRAL INVERTER and DC BACKUP POWER SUPPLY COMBINATION UNIT

Single-Phase power system for incandescent, fluorescent and low voltage emergency lighting.

SPECIFICATIONS

INPUT

- Voltage: 120 or 277 volt AC
- Frequency: 60/50 Hz
- Input voltage variation: ±10%

OUTPUT

- Power: 300/400 watt DC at 12 or 24 volt, 300/400 watt AC at 120/277 volt
- Output regulation: ±5%
- Voltage waveform: Pure sine

PROTECTION

- Battery over and under voltage
- Overload and short circuit protection
- Reverese polarity protection
- Over temperature protection

OTHER SPECS

- Transfer time: 6 (ms)
- Battery run time: 90 minutes standard, other run times available on request
- Battery recharge time: per U.L. 924
- Width: 18 inches
- Height: 15 inches
- Depth 8 inches
- Weight: Approx. 50-100 lbs, depending on the model
- Finish: Powder coat white (standard)
- Battery Volmeter and Ammeter

OPTIONS

- Time Delay Relay
- Emergency Lighting Heads
- Remote Test Switch
- Special Color

All specifications subject to change without notice.

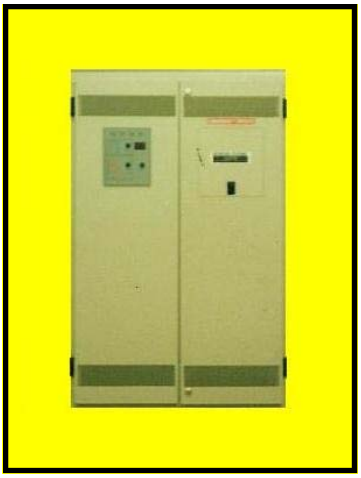
329 Otter Street, Bristol, PA 19007 • Tele: (215) 788-8870 • Fax: (215) 788-8873

ISI

ISI - IPS3

STANDARD TRANSFER CENTRAL INVERTER

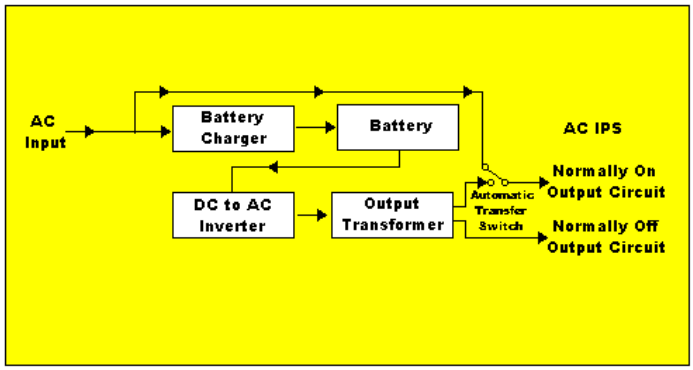
The Inverter Systems, Inc. IPS3 central inverters represent the state-of-the-art in central inverter technology. On-board micro-processors control all system functions and provide the user with information concerning operation of critical system functions. The inverter design utilizes the latest PWM/IGBT technology for efficiency and reliability. Systems are floor mounted, convection cooled and mounted in heavy gauge sheet metal cabinets requiring front access only. Key-locked doors are supplied for added security and safety. Each cabinet contains knockouts for inter-wiring with BX, Romex, or conduit. Systems 4.8kVA and below are self-contained while larger systems require external, stackable battery cabinets to house the batteries which supply 90 minutes of emergency run time.



OPERATION

The AC utility shall power the load through an electro-mechanical switch with a 10000 AIC rating. A Bi-directional transformer shall also power the battery charger, which in turn charge the batteries. Instantaneously after a utility power failure or utility brownout condition, the solid state driven transfer switch will disconnect the AC utility from the load, start the inverter and connect the load to this energy storage transformer. The maximum interruption to the load for this transition shall be 50 millisecond maximum. The inverter will power the load with a low distortion sine wave form, simulating the AC utility, After the AC utility returns, the transfer switch shall reconnect the AC utility to the load with a 50 millisecond maximum interruption and the battery charger shall automatically recharge the batteries. Complete load protection from overload or over voltage shall be accomplished via the on-board microprocessor. This method provides maximum load protection from any IPS3 failure mode.

This inverter shall be designed with a microprocessor that control IGBT transistors and generates a sinusoidal pulse width modulation (PWM) output. All magnetic (transformers, chokes, etc.) used within the inverter shall be constructed from UL class H materials. The battery charger shall include a full wave bridge rectifier. It shall be of solid state construction and provide two rates of charge. This charger shall provide a constant voltage, current limited charge. Recharge time shall be 24 hours maximum.



STANDARD FEATURES:

- Available in standard capacities from 1500 VA to 16.7 kVA
- Modular design provides electronic assemblies mounted.
- 98% high-efficiency off-line operation
- State of the art IGBT technology.
- Short-circuit protected.
- Standard front panel instrumentation includes, indicators: battery charging, battery power, AC line present, system ready; metering: input voltage, output voltage, battery voltage, battery current, AC output current; and system test switch.
- Alarms: output fault, inverter fault, charger fault, high temperature, battery voltage, early warning
- Maintenance free sealed lead calcium batteries are standard.
- Special three phase combination systems available upon request.
- Total harmonic distortion 6% or 3% any one occurrence or less for linear loads at unity power factor.
- 125% overload capability for 5 minutes in emergency mode.
- Handles loads with power factors from .5 lag to .5 lead.
- Output frequency regulation ±1% in emergency mode.
- Precision multi-rate battery charger.
- 24 hour recharge for extended battery life.
- Heavy gauge steel cabinets with filtered air louvers, key locks and removable hinged front opening doors for ease of access and maintenance.
- System cooling by a fan and natural convection means.
- Engineered for standard 90 minute emergency operation, extended run times available (consult factory).
- Suitable for extreme temperature conditions from 0° to +40° C (continuous operation at high or low ambient temperatures may affect battery capacity and life, see battery warranty sheet for details).
- New York City approved.
- U.L. 924 listed.

All specifications subject to change without notice.

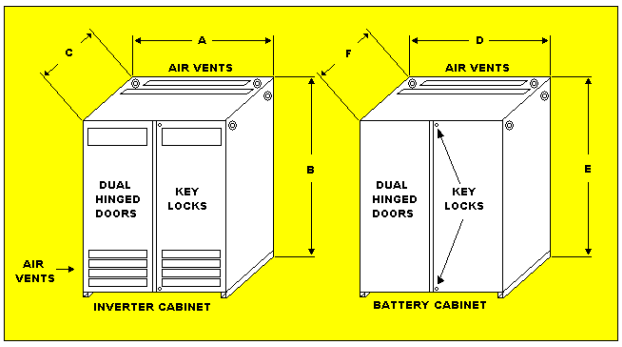
329 Otter Street, Bristol, PA 19007 • Tele: (215) 788-8870 • Fax: (215) 788-8873 **ISI**

ISI-IPS3 Model Capacity VA	Efficiency @ full load	Heat Loss BTU's	Inverter Cabinet Dimensions (inches) W (A)	H (B)	D (C)	Weight (lbs.)	Battery Cabinet Dimensions (inches) W (D)	H (E)	D (F)	# Batt. Cabinets Required	Weight of add'l Batt. Cabinets (lbs.)	Total system shipping weight (lbs.)
ISI-IPS3-1500	98%	75	30	47	25	250				--		546
ISI-IPS3-2250	98%	100	30	47	25	265				--		709
ISI-IPS3-3000	98%	160	30	47	25	295				--		887
ISI-IPS3-3750	98%	200	30	47	25	305				--		1045
ISI-IPS3-4800	98%	245	30	47	25	315				--		1203
ISI-IPS3-6000	98%	300	30	47	25	350	30	47	25	1	210	1670
ISI-IPS3-8000	98%	400	30	47	25	375	30	47	25	2	232	2087
ISI-IPS3-10,000	98%	500	30	47	25	435	30	47	25	2	420	2631
ISI-IPS3-12,500	98%	660	30	47	25	465	30	47	25	2	420	3105
ISI-IPS3-16,700	98%	840	30	47	25	530	30	47	25	3	464	3954

SPECIFICATIONS:

- The emergency lighting inverter system shall be a standard transfer (50ms) high efficiency off-line system suitable for sustaining and operating fluorescent and incandescent lamps in the event of a power outage for a minimum 90 minutes duration at the rated load and be listed and labeled to U.L. 924.
- The entire system shall be of a modular construction with removable electronic modules for ease of installation and maintenance. Cabinets shall be constructed of code gauge steel with removable key locked hinged doors finished in an acid resistant enamel with a modified vinyl undercoat.
- The inverter shall be solid state design with transistor power drive circuit for precision switching and maximum reliability with regulated Ferro resonant output transformer.
- The AC input voltage shall be (120 or 277V single phase two wire plus ground).
- The output voltage shall be provided as a) 120 or 277V single phase, two wire, or mixed 120V @(specify) VA, 277V @(specify) VA **normally on**, or b) 120 or 277V single phase two wire, or mixed 120V @(specify) VA, 277V @(specify) VA **normally off**. The output frequency shall be 60HZ ±1HZ for all loads.
- The system shall reliably handle from .5 leading to .5 lagging power factor. The output voltage regulation shall be ±4%. The system's output shall be capable of 130% overload for 5 minutes. Harmonic distortion 3% total.
- The battery charger is microprocessor controlled that continuously monitors and maintains the systems batteries and has a low voltage disconnect for long battery life. The charger shall fully recharge the batteries within the requirements of U.L. 924 specifications.
- Self-Protective Features: Output short circuit protection with fail safe start-up, and reverse input polarity protection.
- The system's batteries shall be of the sealed maintenance free lead acid type.
- Options: Refer to Option Selection Chart for descriptions and nomenclature. Popular options are: Start-up Service, Input and Output Circuit Breakers G(1) and C ( ), Battery Exerciser and Variable Time Delay.

The system shall be an Inverter Systems model No._____ as manufactured and warranted by Inverter Systems, Inc. (for copy of detailed specification format - consult factory).



ORDERING GUIDE:

When ordering an ISI-IPS3 inverter from Inverter Systems, Inc. use:

ISI-IPS3	6000	277	277	G(1)	C(4)	SB	OPTIONS
1	2	3	4	5	6	7	8

1. **Model Series**	ISI-IPS3
2. **Volt Amp (VA) Rating**	1500 to 16,700
Select required capacity in volt amps from model tables above	
3. **Input Voltage**	
120V 2 wire plus ground	120
277V 2 wire plus ground	277
Other voltages (specify)	( )
4. **Output Voltage**	
120V 2 wire plus ground	120
277V 2 wire plus ground	277
Other voltages (specify)	( )
5. **Input Circuit Breaker**	
Specify input circuit breaker	G(1)
6. **Output Circuit Breakers**	
Specify number of output circuit breakers (max. 10 per system)	C( )
7. **Battery Type**	
Maintenance free sealed lead acid	SB
8. **Options**	
Select requirements from Options Guide, popular options are:	
Start-up service	SUS
Variable Time Delay	VTD

WARRANTY:

Electronics Assembly

Inverter Systems, Inc. warrants the ISI-IPS3 electronics assembly (except batteries) against defects in material and workmanship for a period of one year from date of shipment. Inverter Systems, Inc. will either repair or replace any properly installed ISI-IPS3 system which fails under normal operating conditions provided that it is returned to the factory, transportation prepaid, and our inspection determines it to be defective under the terms of this warranty.

The warranty covers only equipment other than batteries manufactured by Inverter Systems, Inc. and does not extend to transportation, installation or replacement charges, nor does it apply to any other equipment of another manufacturer used in conjunction with ISI equipment. No other warranty expressed or implied exists beyond that included in this statement.

Battery Warranty

Sealed lead calcium batteries carry a 1 year full, 10 year pro-rated limited warranty.

Important note: Battery warranty is limited to certain environmental, operational and installation limitations (refer to detailed Battery Warranty Terms and Conditions).

329 Otter Street, Bristol, PA 19007 • Tele: (215) 788-8870 • Fax: (215) 788-8873 **ISI**

ISI - FTW

STAND-BY SINGLE PHASE AC SINE WAVE, LOW CAPACITY, WALL MOUNTED UNINTERRUPTIBLE CENTRAL SYSTEM

The Inverter Systems, Inc. ISI-FTW provides a high efficiency single phase "stand-by" central AC emergency power system ideally suited for H.I.D., fluorescent and incandescent emergency lighting applications or other auxiliary loads that require a "fast transfer, no-break" voltage regulated and line conditioned power supply.

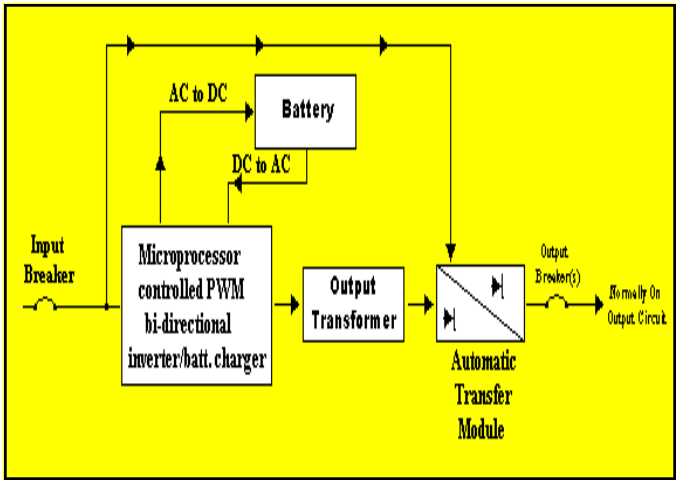
The ISI-FTW demonstrates exceptional 98% operating efficiency by means of the fast "no-break" transfer circuit, providing considerable running cost savings over typical double conversion UPS systems. Available in a wide range of voltages and four different capacities, the ISI-FTW is designed to provide up to 90 minutes of standby emergency power in accordance with the requirements of U.L. 924.

OPERATION

The inverter is normally off and the commercial AC power continuously supplies the critical load. The input converter (bi-directional transformer) derives power from the commercial AC power source and supplies to the inverter while simultaneously providing floating charge to the batteries.

Upon failure of the commercial AC power the inverter instantaneously, with a maximum of a 2-millisecond break, switches its power supply from the input converter to the battery system. There shall be no loss of power to the critical load upon failure or restoration of the utility source.

An automatic low voltage cutoff circuit disengages the inverter system at the useful end of the battery capacity preventing deep discharge battery damage. Upon restoration of the utility supply the system automatically returns to the normal "standby" mode and restores the battery to full charge.



STANDARD FEATURES:

- PWM/MOSFET Inverter Technology for high efficiency and low THD
- UL 924 listed and meets or exceeds the requirements of OSHA for emergency lighting and power. NFPA70, NFPA101, NFPA110, UBC, and SBCCI and New York City approved
- 98% efficient in standby mode means no fan for cooling
- Compatible with HID, fluorescent, incandescent, and electronic low voltage lighting
- Maintenance-free, sealed lead calcium valve regulated lead acid batteries
- Field upgradeable from 500VA to 2000VA by additional battery modules
- Protection circuit breakers are battery, Input and Output
- Front panel interface: Microprocessor controlled, 2x20 character display with touch pad controls
- Programmable set points are password-controlled with user and service levels
- Standard Alarms: Output, High Temp, Near Low Battery, Inverter, Load Reduction, Low Voltage, Charger, Overload, High Voltage, Low Battery, Overload Shutdown
- Digital metering indicates: input voltage, output voltage, current output, battery voltage, system days, date, inverter minutes, ambient temperature, battery current, inverter watts, VA output
- Diagnostic Features: User programmable with password protection for alarms and diagnostics, Self testing and diagnostic with event, test and alarm logs; Standard logs: alarm log (75), event log (75), test log (50)
- Small footprint, both inverter and battery unit each measure 26"W x 10"H x 10"D
- Floor or wall-mounted
- 16AWG (.059") steel construction with powder coat surface
- Modular design allows separation of inverter and battery modules
- Electrical knockouts for easy contractor connection and installation
- Circuit breaker and fuse access panel for easy routine maintenance

All specifications subject to change without notice.

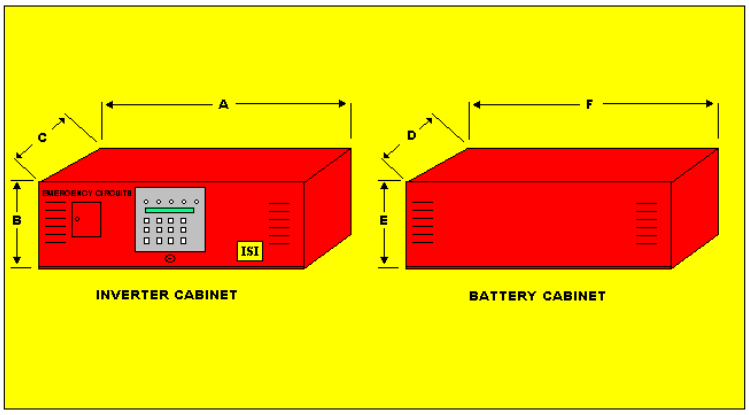
329 Otter Street, Bristol, PA 19007 • Tele: (215) 788-8870 • Fax: (215) 788-8873 **ISI**

ISI-FTW Model Capacity VA	Efficiency @ full load	90 min. Average Battery current	Inverter Cabinet Dimensions (inches) W (A)	H (B)	D (C)	Battery Cabinet Dimensions (inches) W (D)	H (E)	D (F)	# Batt. Cabinets Required	*Current Input (amps)	*Current Output (amps)	Total system shipping weight (lbs.)
ISI-FTW-500	98%	13.5 ADC	26	10	10	26	10	10	1	5.2 / 1.8	4.16 / 1.8	206
ISI-FTW-1000	98%	26.5 ADC	26	10	10	26	10	10	2	10.5 / 3.61	8.33 / 3.61	335
ISI-FTW-1500	98%	40 ADC	26	10	10	26	10	10	3	15.62 / 5.42	12.5 / 5.41	464
ISI-FTW-2000	98%	52 ADC	26	10	10	26	10	10	4	20.8 / 7.22	16.66 / 7.22	592

*Current input reflects system at maximum charge current plus maximum load current

SPECIFICATIONS:

- The emergency lighting inverter system shall be an stand-by no-break system suitable for sustaining and operating H.I.D., fluorescent and incandescent lamps in the event of a power outage for a minimum 90 minutes duration at the rated load and be listed and labeled to U.L. 924.
- The entire system shall be of a modular construction with removable electronic modules for ease of installation and maintenance. Cabinets shall be constructed of code gauge steel with removable key locked hinged doors finished in an acid resistant enamel with a modified vinyl undercoat.
- The inverter shall be a standby UPS. PWM inverter type utilizing MOSFET technology with 2mS transfer time.
- The AC input voltage shall be (120 or 277V single phase two wire plus ground).
- The output voltage shall be provided as a) 120 or 277V single phase, two wire **normally on**, or b) 120 or 277V single phase, two wire or mixed 120V @(specify) VA, 277V @(specify) VA **normally off**. The output frequency shall be 60HZ ± 0.05HZ for all loads.
- The system shall reliably handle from .5 leading to .5 lagging power factor. The output voltage regulation shall be ±3% or better from 0% to 100% of rated load. The system's output shall be capable of 115% overload indefinitely, 125% for five minutes. Harmonic distortion <10% total or 3% any single harmonic.
- The battery charger, in the standard configuration shall convert AC voltage to DC voltage. With commercial power present, the inverter power transformer is powered and the bidirectional MOSFET recharges the batteries. Once the batteries have received full recharge, a constant trickle charge maintains batteries at maximum level. Recharge time is 24 hours maximum at nominal AC input voltage. The AC ripple current of the DC output meets the battery manufacturer specification, ensuring maximum life.
- The system's batteries shall be of the (sealed maintenance free lead acid) type.
- Options: Refer to Option Selection Chart for descriptions and nomenclature. Popular options are: Start-up Service, Output Circuit Breakers, Remote Meter Panel, Output Trip Alarms
- The system shall be an Inverter Systems model No._____ as manufactured for and warranted by Inverter Systems, Inc. (for copy of detailed specification format - consult factory)



ORDERING GUIDE:

When ordering an ISI-FTW from Inverter Systems, Inc., use:

ISI-FTW - 500 - 277 - 277 - C(4) - SB - OPTIONS
1 2 3 4 5 6 7

1. **Model Series**	ISI-FTW
2. **Volt Amp (VA) Rating**	500 to2000
Select required capacity in volt	
Amps from model tables above	
3. **Input Voltage**	
120V 2 wire plus ground	120
277V 2 wire plus ground	277
Other voltages (specify)	( )
4. **Output Voltage**	
120V 2 wire plus ground	120
277V 2 wire plus ground	277
Other voltages (specify)	( )
5. **Output Circuit Breakers**	
Specify number of output circuit	C( )
Breakers (maximum 2 per system)	
6. **Battery Type**	
Maintenance free sealed lead acid	SB
7. **Options**	
Select requirements from Options Guide,	
Popular options are:	
Start-up Service	SUS
Output Trip Alarm	OTA
Summary Dry Contacts (Form "C")	DCS
Remote Meter Panel	RMP

WARRANTY:

Electronics Assembly

Inverter Systems, Inc. warrants the ISI-FTW electronics assembly (except batteries) against defects in material and workmanship for a period of one year from date of shipment. Inverter Systems, Inc. will either repair or replace any properly installed ISI-FTW system which fails under normal operating conditions provided that it is returned to the factory, transportation prepaid, and our inspection determines it to be defective under the terms of this warranty.

The warranty covers only equipment other than batteries manufactured by Inverter Systems, Inc. and does not extend to transportation, installation or replacement charges, nor does it apply to any other equipment of another manufacturer used in conjunction with ISI equipment. No other warranty expressed or implied exists beyond that included in this statement.

Battery Warranty

Sealed lead calcium batteries carry a 1 year full, 9 year pro-rated limited warranty.

Important note: Battery warranty is limited to certain environmental, operational and installation limitations (refer to detailed Battery Warranty Terms and Conditions).

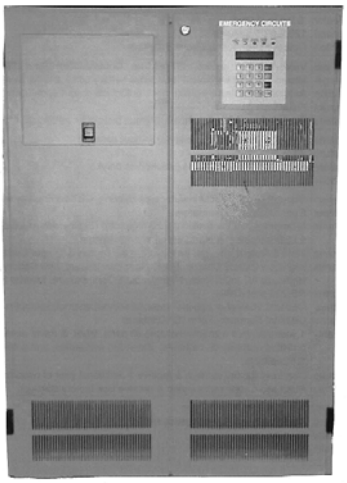
329 Otter Street, Bristol, PA 19007 • Tele: (215) 788-8870 • Fax: (215) 788-8873 **ISI**

ISI - UFT

STAND-BY SINGLE PHASE AC SINE WAVE UNINTERRUPTIBLE CENTRAL SYSTEM

The Inverter Systems, Inc. ISI-UFT provides a high efficiency single phase "stand-by" central AC emergency power system ideally suited for H.I.D., fluorescent and incandescent emergency lighting applications or other auxiliary loads that require a "fast transfer, no-break" voltage regulated and line conditioned power supply.

The ISI-UFT demonstrates exceptional 98% operating efficiency by means of the fast "no-break" transfer circuit, providing considerable running cost savings over typical double conversion UPS systems. Available in a wide range of capacities and voltages, the ISI-UFT is designed to provide up to 90 minutes of standby emergency power in accordance with the requirements of U.L. 924.

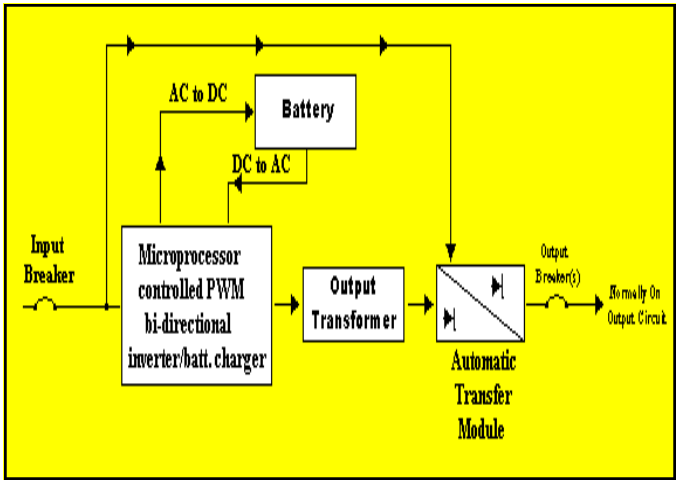


OPERATION

The inverter is normally off and the commercial AC power continuously supplies the critical load. The input converter (bi-directional transformer) derives power from the commercial AC power source and supplies to the inverter while simultaneously providing floating charge to the batteries.

Upon failure of the commercial AC power the inverter instantaneously, with a maximum of a 2-millisecond break, switches its power supply from the input converter to the battery system. There shall be no loss of power to the critical load upon failure or restoration of the utility source.

An automatic low voltage cutoff circuit disengages the inverter system at the useful end of the battery capacity preventing deep discharge battery damage. Upon restoration of the utility supply the system automatically returns to the normal "standby" mode and restores the battery to full charge.



STANDARD FEATURES:

- Available in standard capacities from 1500 VA to 16.7 kVA
- Modular design provides electronic assemblies mounted on removable modules for ease of maintenance
- 98% high-efficiency stand-by operation
- Industry proven continuously on PWM inverter utilizes switching transistor failure whilst still maintaining full rated load output
- Short-circuit protected with critical point fuses and breakers
- Digital metering indicates: input voltage, output voltage, output frequency, output current, battery voltage, battery current, VA output, inverter watts, ambient temperature, system day, inverter minutes
- System test switch
- Available with many alarm function, monitoring and diagnostic options -refer Option Selection chart
- Maintenance free sealed lead calcium batteries standard, wet nickel cadmium batteries optional
- Heavy gauge steel cabinets with filtered air louvers, key locks and removable hinged front opening doors for ease of access and maintenance
- Engineered for standard 90 minute emergency operation, (extended run times available)
- Suitable for extreme temperature from 0 to 40 C (continuous operation at high or low ambient temperatures may affect battery capacity and life; see battery warranty sheet for details)
- Input lighting protection meets IEEE/ANSI C62.45-45 (CAT A & B)
- Input current harmonic distortion 10% or less at full load
- Input circuit breaker included for complete protection
- Load power factor .5 lag to .5 leading
- Output distortion 3% THD linear load
  U.L. 924 listed

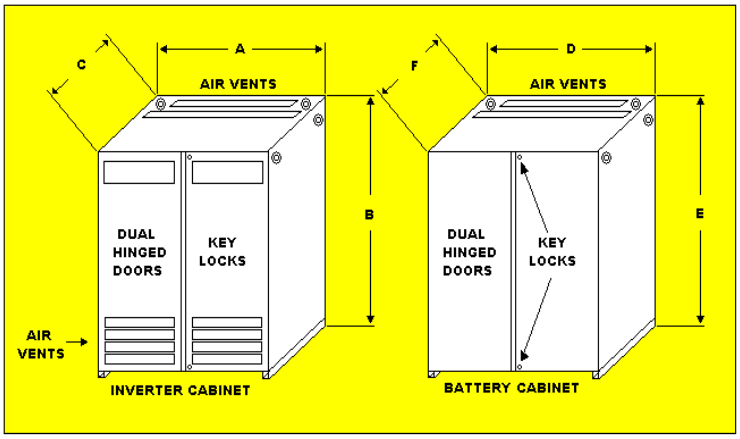
All specifications subject to change without notice.

329 Otter Street, Bristol, PA 19007 • Tele: (215) 788-8870 • Fax: (215) 788-8873 **ISI**

ISI-UFT Model Capacity VA	Efficiency @ full load	Heat Loss BTU's	Inverter Cabinet Dimensions (inches) W (A)	H (B)	D (C)	Weight (lbs.)	Battery Cabinet Dimensions (inches) W (D)	H (E)	D (F)	# Batt. Cabinets Required	Weight of add'l Batt. Cabinets (lbs.)	Total system shipping weight (lbs.)
ISI-UFT-1500	98%	75	30	47	25	250				--		546
ISI-UFT-2250	98%	100	30	47	25	265				--		709
ISI-UFT-3000	98%	160	30	47	25	295				--		887
ISI-UFT-3750	98%	200	30	47	25	305				--		1045
ISI-UFT-4800	98%	245	30	47	25	315				--		1203
ISI-UFT-6000	98%	300	30	47	25	350	30	47	25	1	210	1670
ISI-UFT-8000	98%	400	30	47	25	375	30	47	25	1	232	2087
ISI-UFT-10,000	98%	500	30	47	25	435	30	47	25	2	420	2631
ISI-UFT-12,500	98%	660	30	47	25	465	30	47	25	2	420	3105
ISI-UFT-16,700	98%	840	30	47	25	530	30	47	25	2	464	3974

SPECIFICATIONS:

- The emergency lighting inverter system shall be an stand-by no-break system suitable for sustaining and operating H.I.D., fluorescent and incandescent lamps in the event of a power outage for a minimum 90 minutes duration at the rated load and be listed and labeled to U.L. 924.
- The entire system shall be of a modular construction with removable electronic modules for ease of installation and maintenance. Cabinets shall be constructed of code gauge steel with removable key locked hinged doors finished in an acid resistant enamel with a modified vinyl undercoat.
- The inverter shall be a standby UPS. PWM inverter type utilizing IGBT technology with 2mS transfer time.
- The AC input voltage shall be (120 or 277V single phase two wire plus ground).
- The output voltage shall be provided as a) 120 or 277V single phase, two wire **normally on**, or b) 120 or 277V single phase, two wire or mixed 120V @(specify) VA, 277V @(specify) VA **normally off**. The output frequency shall be 60HZ ± 0.05HZ for all loads.
- The system shall reliably handle from .5 leading to .5 lagging power factor. The output voltage regulation shall be ±3% or better from 0% to 100% of rated load. The system's output shall be capable of 125% overload for 5 minutes. Harmonic distortion <10% total or 3% any single harmonic.
- The battery charger, in the standard configuration shall convert AC voltage to DC voltage. With commercial power present, the inverter power transformer is powered and the IGBT modules are microprocessor controlled to recharge the batteries. The temperature compensated battery charger circuit supplies constant voltage and constant current to the batteries. Once the batteries have received full recharge, a constant trickle charge maintains batteries at maximum level. Recharge time is 24 hours maximum at nominal AC input voltage. The AC ripple current of the DC output meets the battery manufacturer specification, ensuring maximum life.
- The system's batteries shall be of the (sealed maintenance free lead acid) **or** (wet vented nickel cadmium) type.
- Options: Refer to Option Selection Chart for descriptions and nomenclature. Popular options are: Start-up Service, Output Circuit Breakers, Maintenance Bypass Switch, Output Trip Alarms
- The system shall be an Inverter Systems model No._____ as manufactured for and warranted by Inverter Systems, Inc. (for copy of detailed specification format - consult factory)



ORDERING GUIDE:

When ordering an ISI-UFT from Inverter Systems, Inc., use:

ISI-UFT - 8000 - 277 - 277 - C(4) - SB - OPTIONS
1 2 3 4 5 6 7

1. **Model Series**	ISI-UFT
2. **Volt Amp (VA) Rating**	1500 to16700
Select required capacity in volt Amps from model tables above	
3. **Input Voltage**	
120V 2 wire plus ground	120
277V 2 wire plus ground	277
Other voltages (specify)	( )
4. **Output Voltage**	
120V 2 wire plus ground	120
277V 2 wire plus ground	277
Other voltages (specify)	( )
5. **Output Circuit Breakers**	
Specify number of output circuit Breakers (maximum 10 per system)	C( )
6. **Battery Type**	
Maintenance free sealed lead acid	SB
Wet nickel cadmium	NC
6. **Options**	
Select requirements from Options Guide, Popular options are:	
Start-up Service	SUS
Output Trip Alarm	OTA
Summary Dry Contacts (Form "C")	DCS
Maintenance Bypass Switch	MBYP

WARRANTY:

Electronics Assembly

Inverter Systems, Inc. warrants the ISI-UFT electronics assembly (except batteries) against defects in material and workmanship for a period of one year from date of shipment. Inverter Systems, Inc. will either repair or replace any properly installed ISI-UFT system which fails under normal operating conditions provided that it is returned to the factory, transportation prepaid, and our inspection determines it to be defective under the terms of this warranty.

The warranty covers only equipment other than batteries manufactured by Inverter Systems, Inc. and does not extend to transportation, installation or replacement charges, nor does it apply to any other equipment of another manufacturer used in conjunction with ISI equipment. No other warranty expressed or implied exists beyond that included in this statement.

Battery Warranty

Sealed lead calcium batteries carry a 1 year full, 9 year pro-rated limited warranty. Wet nickel cadmium batteries carry a 1 year full, 10 year pro-rated limited warranty.

Important note: Battery warranty is limited to certain environmental, operational and installation limitations (refer to detailed Battery Warranty Terms and Conditions).

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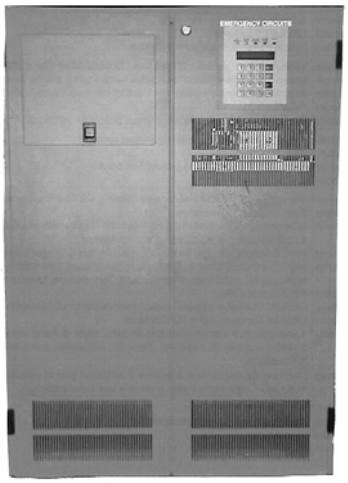
ISI - 3UFT

STAND-BY THREE PHASE AC SINE WAVE UNINTERRUPTIBLE CENTRAL SYSTEM

The Inverter Systems, Inc. ISI-3UFT provides a high efficiency three phase "stand-by" central AC emergency power system ideally suited for H.I.D., fluorescent and incandescent emergency lighting applications or other auxiliary loads that require a "fast transfer, no-break" voltage regulated and line conditioned power supply.

The ISI-3UFT demonstrates exceptional 98% operating efficiency by means of the fast "no-break" transfer circuit, providing considerable running cost savings over typical double conversion UPS systems. Available in a wide range of capacities and voltages, the ISI-3UFT is designed to provide up to 90 minutes of standby emergency power in accordance with the requirements of U.L. 924.

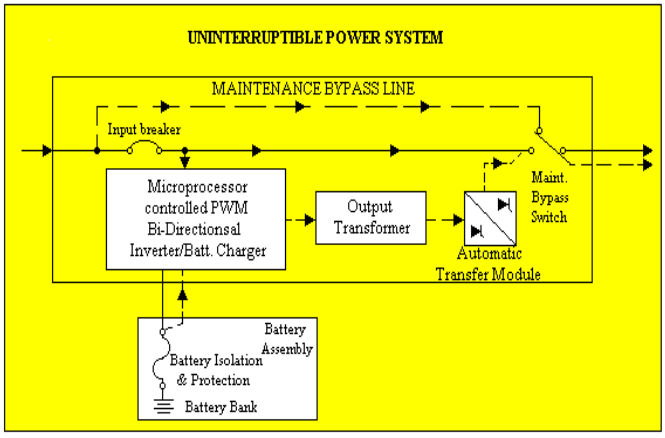


OPERATION

The inverter is normally off and the commercial AC power continuously supplies the critical load. The inverter is normally off and the commercial AC power continuously supplies the critical load. The input converter (bi-directional transformer) derives power from the commercial AC power source and supplies to the inverter while simultaneously providing floating charge to the batteries.

Upon failure of the commercial AC power the inverter instantaneously, with a maximum of a 2-millisecond break, switches its power supply from the input converter to the battery system. There shall be no loss of power to the critical load upon failure or restoration of the utility source.

An automatic low voltage cutoff circuit disengages the inverter system at the useful end of the battery capacity preventing deep discharge battery damage. Upon restoration of the utility supply the system automatically returns to the normal "standby" mode and restores the battery to full charge.



STANDARD FEATURES:

- Available in standard capacities from 4.8kVA to 50 kVA.
- Modular design provides electronic assemblies mounted on removable modules for ease of maintenance
- 98% high-efficiency stand-by operation
- Industry proven continuously on PWM inverter.
- Short-circuit protected with critical point fuses and breakers
- Digital metering indicates: input voltage, output voltage, output frequency, output current, battery voltage, battery current, VA output, inverter watts, ambient temperature, system day, inverter minutes
- System includes an internal manual maintenance bypass switch, used to power load direct from utility isolating the inverter system
- System test switch
- Comes standard with many alarm function, monitoring and diagnostic features
- Maintenance free sealed lead calcium batteries standard.
- Heavy gauge steel cabinets with filtered air louvers, key locks and removable hinged front opening doors for ease of access and maintenance
- Engineered for standard 90 minute emergency operation, (extended run times available)
- Suitable for extreme temperature from 20º to 30º C (continuous operation at high or low ambient temperatures may affect battery capacity and life; see battery warranty sheet for details)
- Input lighting protection meets IEEE/ANSI C62.45-45 (CAT A & B)
- Input current harmonic distortion 10% or less at full load
- Input circuit breaker rated at 22k AIC minimum
- Load power factor .5 lag to .5 leading
- Output distortion 3% THD linear load
- U.L. 924 Listed
- Front Battery Access

All specifications subject to change without notice.

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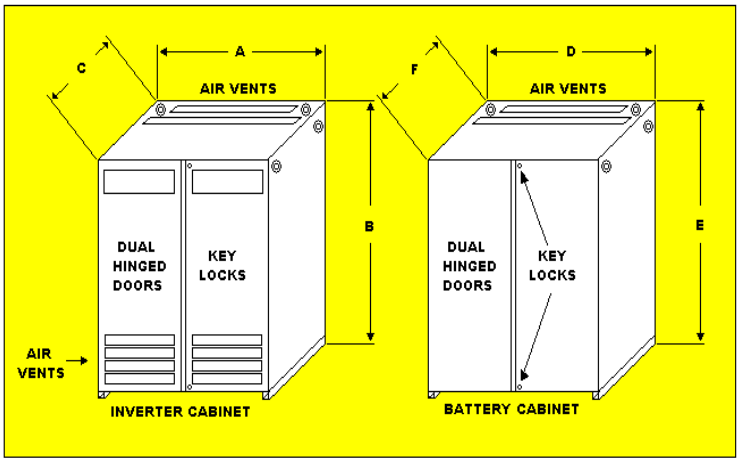
ISI-3UFT Model Capacity VA	Efficiency	Heat Loss BTU's	Inverter Cabinet Dimensions (Inches) W (A)	H (B)	D (C)	Weight (lbs.)	Battery Cabinet Dimensions (Inches) W (D)	H (E)	D (F)	No. Batt. Cabinets Required	Weight of Additional Batt. Cabinet lbs.	Total System shipping Weight (lbs.)
ISI-3UFT-4800	98	326	30	47	25	535	30	47	25	1	210	1633
ISI-3UFT-6000	98	408	30	47	25	535	30	47	25	1	210	1855
ISI-3UFT-8000	98	544	30	47	25	535	30	47	25	1	232	2247
ISI-3UFT-10000	98	680	30	47	25	639	30	47	25	2	420	2835
ISI-3UFT-12500	98	860	30	47	25	639	30	47	25	2	420	3279
ISI-3UFT-16700	98	1136	30	47	25	639	30	47	25	2	464	4063
ISI-3UFT-24000	98	1632	44	72	31	1250	48	72	31	1	700	6390
ISI-3UFT-33000	98	2244	44	72	31	1250	48	72	31	2	1300	8630
ISI-3UFT-40000	98	2720	44	72	31	1450	48	72	31	2	1300	10,160
ISI-3UFT-50000	98	3400	44	72	31	1450	48	72	31	2	1400	11,980

SPECIFICATIONS:

- The emergency lighting inverter system shall be an on-line no-break system suitable for sustaining and operating H.I.D., fluorescent and incandescent lamps in the event of a power outage for a minimum 90 minutes duration at the rated load and be listed and labeled to U.L. 924.
- The entire system shall be of a modular construction with removable electronic modules for ease of installation and maintenance. Cabinets shall be constructed of code gauge steel with removable key locked hinged doors finished in an acid resistant enamel with a modified vinyl undercoat.
- The inverter shall be a continuously on solid state pulse width modulated type \ providing "no-break" regulated and line conditioned power supply. The PWM inverter shall feature internal redundancy allowing up to 20% switching transistor failure whilst still maintaining full rated load output capacity.
- The AC input voltage shall be (120/208 or 277/480 three phase four wire plus ground).
- The output voltage shall be provided as (120/208 or 277/480 three phase, four wire **normally on**). Specify if normally off output is required. The output frequency shall be 60HZ ±1HZ for all loads.
- The system shall reliably handle from .5 leading to .5 lagging power factor. The output voltage regulation shall be ±6% or better from 0% to 100% of rated load. The system's output shall be capable of 115% overload for 5 minutes. Harmonic distortion 3% any single harmonic.
- The battery charger shall be of a dual rate design and feature a 90 day automatic equalization charge, low voltage disconnect and short circuit protected for long battery life. The charger shall fully recharge the batteries within the requirements of U.L. 924 specifications.
- The system's batteries shall be of the (sealed maintenance free lead acid) **or** (wet vented nickel cadmium) type.
- Options: Refer to Option Selection Chart for descriptions and nomenclature. Popular options are: Start-up Service, Output Circuit Breakers, Dry Summary Contacts, Output Trip Alarms
- The system shall be an Inverter Systems model No._____ as manufactured and warranted by Inverter Systems, Inc. (for copy of detailed specification format - consult factory)



ORDERING GUIDE:

When ordering an ISI-3UFT from Inverter Systems, Inc., use:

ISI-3UFT (1) - 16700 (2) - 277/480 (3) - 277/480 (4) - C(4) (5) - SB (6) - OPTIONS (7)

1. **Model Series** ISI-3UFT

2. **Volt Amp (VA) Rating** 4800 to 50000
   Select required capacity in volt
   Amps from model tables above

3. **Input Voltage**
   120/208 four wire plus ground 120/208
   277/480 four wire plus ground 277/480
   Other voltages (specify) ( )

4. **Output Voltage**
   120/208 four wire plus ground 120/208
   277/480 four wire plus ground 277/480
   Other voltages (specify) ( )

5. **Output Circuit Breakers**
   Specify number of output circuit C( )
   Breakers (maximum 10 per system)

6. **Battery Type**
   Maintenance free sealed lead acid SB

7. **Options**
   Select requirements from Options Guide,
   Popular options are:
   Start-up Service SUS
   Output Trip Alarm OTA
   Summary Dry Contacts (Form "C") DCS
   (For additional options refer to Options Guide.)

WARRANTY:

Electronics Assembly

Inverter Systems, Inc. warrants the ISI-3UFT electronics assembly (except batteries) against defects in material and workmanship for a period of one year from date of shipment. Inverter Systems, Inc. will either repair or replace any properly installed ISI-3UFT system which fails under normal operating conditions provided that it is returned to the factory, transportation prepaid, and our inspection determines it to be defective under the terms of this warranty.

The warranty covers only equipment other than batteries manufactured by Inverter Systems, Inc. and does not extend to transportation, installation or replacement charges, nor does it apply to any other equipment of another manufacturer used in conjunction with ISI equipment. No other warranty expressed or implied exists beyond that included in this statement.

Battery Warranty

Sealed lead calcium batteries carry a 1 year full, 9 year pro-rated limited warranty. Wet nickel cadmium batteries carry a 1 year full, 10 year pro-rated limited warranty.

Important note: Battery warranty is limited to certain environmental, operational and installation limitations (refer to detailed Battery Warranty Terms and Conditions).

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ISI - DC

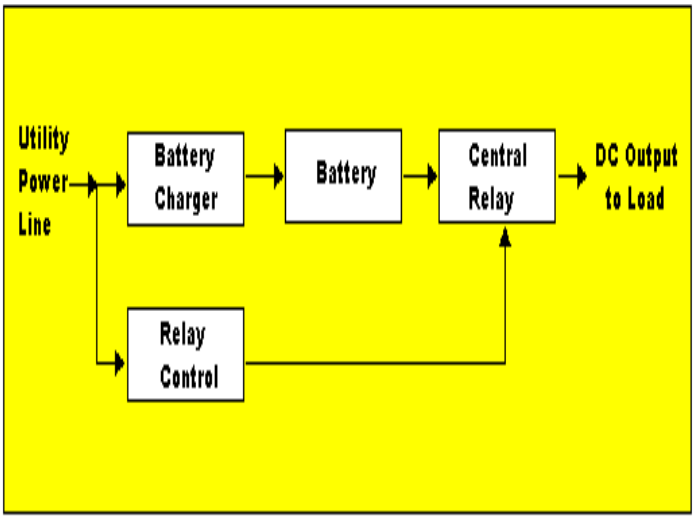
12-120V DC CENTRAL POWER SYSTEMS

The Inverter Systems, Inc. ISI-DC Series offers a cost effective alternative to self contained battery emergency/ fluorescent power pack emergency lighting schemes and smaller AC inverters by providing a central DC power supply with which to feed incandescent lamps or fluorescent DC inverter modules enabling ease of monitoring and maintenance.

The ISI-DC is available in a wide range of capacities in 12, 24, 36, 48 and 120V DC output loads. Additionally, these systems are suited to other emergency loads such as burglar and fire alarm systems which require a "normally off" DC backup power supply. Standard systems are engineered to provide up to 90 minutes of standby DC emergency power in accordance with the requirements of U.L. 924 (other run times also available).

OPERATION

In the normal standby mode the utility AC maintains supply to the system's isolation transformer, battery charger and central relays; no output is derived at the DC load. In the event of a utility supply failure or brownout condition the system's relay sensors automatically connects the DC load to the battery bank, providing the rated DC load for the required duration. Upon restoration of the utility supply the system automatically returns to the normal standby mode and restores the battery to full charge.



STANDARD FEATURES:

- Available in 12, 24, 36, 48 & 120 volt DC output from 500 to 10,000 watts
- Modular design provides electronic assemblies mounted on removable modules for ease of maintenance
- Transfer time to full DC load 100ms
- Precision multi-rated battery charger with automatic 90 day equalization feature maintains batteries at maximum capacity; internal LED indicators for charger status
- 24 hour recharge for extended battery life
- Metering and controls include: battery DC voltmeter, input AC voltmeter, utility power indicator, high charge indicator, battery charge ammeter with system test switch
- Heavy gauge steel cabinets with filtered air louvers, key locks and removable hinged front opening doors for ease of access and maintenance
- System cooling by natural convection means
- Maintenance free sealed lead calcium batteries standard, wet nickel cadmium batteries optional
- Engineered for standard 90 minute emergency operation, (extended run times available)
- Suitable for extreme temperature from 0° - 40° C (continuous operation at high or low ambient temperatures may affect battery capacity and life; see battery warranty sheet for details)
- Choice of full or zoned load switching

All specifications subject to change without notice.

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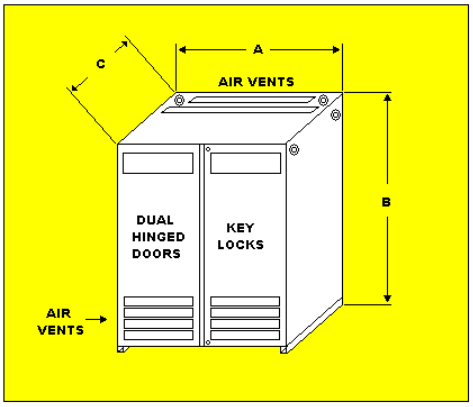
Model # Capacity/VA Rating	Output Watt Rating	Output Voltage VDC	Max. Utility Input Current @120VAC/277VAC		Heat Loss BTU's	Cabinet Dimensions (Inches) W (A)	H (B)	D (C)	System Weight (lbs.)	Battery Voltage VDC	Battery Run Time Minutes	Shipping Weight (lbs.)
ISI-DC-12-500	500	12	2	1	44	32	33	12	180	12	90	255
ISI-DC-12-1000	1000	12	2	1	44	32	33	12	256	12	90	331
ISI-DC-12-1500	1500	12	3	1.5	88	42	38	12	330	12	90	405
ISI-DC-12-2000	2000	12	3	1.5	88	42	38	12	438	12	90	513
ISI-DC-24-1000	1000	24	3	1.5	88	32	33	12	256	24	90	331
ISI-DC-24-2000	2000	24	3	1.5	88	42	38	12	438	24	90	513
ISI-DC-24-3000	3000	24	5	2.2	175	42	50	12	582	24	90	657
ISI-DC-24-4000	4000	24	5	2.2	175	42	50	12	692	24	90	767
ISI-DC-36-1500	1500	36	4	2	132	42	38	12	330	36	90	405
ISI-DC-36-3000	3000	36	4	2	132	42	50	12	574	36	90	6498
ISI-DC-36-4500	4500	36	8	3.5	264	42	50	12	802	36	90	877
ISI-DC-36-6000	6000	36	8	3.5	264	42	62	12	1028	36	90	1103
ISI-DC-48-2000	2000	48	5	2.2	175	42	50	12	438	48	90	513
ISI-DC-48-4000	4000	48	5	2.2	175	42	50	12	718	48	90	793
ISI-DC-48-6000	6000	48	10	4.5	350	42	62	12	1083	48	90	1158
ISI-DC-48-8000	8000	48	10	4.5	350	42	50	19	1303	48	90	1378
ISI-DC-120-5000	5000	120	12	5.5	430	42	50	19	943	120	90	1018
ISI-DC-120-10000	10000	120	12	5.5	430	42	70	19	1725	120	90	1800

SPECIFICATIONS:

- The emergency lighting standby power system shall be a non-maintained off-line DC central power system suitable for incandescent lamps and fluorescent slave inverter module operation. In the event of a power outage the system shall provide the rated load and output DC voltage for 90 minutes duration.
- The entire system shall be of a modular construction with removable electronic modules for ease of installation and maintenance. Cabinets shall be constructed of code gauge steel with removable key locked hinged doors and finished in an acid resistant enamel with a modified vinyl undercoat.
- The DC system output voltage range shall be: Lead acid batteries=2.3V max., 1.75V min. nominal 2 volts per cell; Nickel cadmium batteries=1.55V max., 1.05V min., nominal 1.2 volts per cell.
- The nominal output voltage shall be (12,24,36,48 or 120) VDC "normally off" two wire.
- The AC input voltage shall be (120 or 277V single phase two wire plus ground).
- Battery charger shall be solid-state and of a dual rate design featuring a 90 day boost equalization charge, continuous trickle float charge with integral green, yellow and dual red LED mode indicators, automatic low battery voltage cut-off and reset upon utility return.
- The charger shall fully recharge the batteries within the requirements of U.L. 924 specifications.
- The system's batteries shall be of the (sealed maintenance free lead acid) or (wet vented nickel cadmium) type.
- Options: Refer to Option Selection Chart for descriptions and nomenclature. Popular options are: Start-up Service, Digital Metering, Diagnostic Alarms and Monitoring, Fused output circuits, Battery Exerciser and Charger Failure Alarm
- The system shall be an Inverter Systems model No._____ as manufactured and warranted by Inverter Systems, Inc. (for copy of detailed specification format - consult factory)



ORDERING GUIDE:

When ordering an ISI-DC Central emergency system, use:

ISI-DC - 12 - 500 - 120 - SB - OPTIONS
1 2 3 4 5 6

1. **Model Series**	ISI-DC
2. **Output Voltage VDC**	12, 24, 36, 48 or 120
3. **Output Watt Rating**	500 to 10000
(Select from table above)	
4. **Input Voltage**	
120V 2 wire plus ground	120
277V 2 wire plus ground	277
Other voltages (specify)	( )
5. **Battery Type**	
Maintenance free sealed lead acid	SB
Wet nickel cadmium	NC
6. **Options**	
Select requirements from Options Guide,	
Popular options are:	
Start-up Service	SUS
Charge Failure Alarm	CFA
Output Monitor Alarm	OMA
Diagnostic Microprocessor & Testing	STDIAG
(For additional options refer to Options Guide.)	

WARRANTY:

Electronics Assembly

Inverter Systems, Inc. warrants the ISI-DC electronics assembly (except batteries) against defects in material and workmanship for a period of one year from date of shipment. Inverter Systems, Inc. will either repair or replace any properly installed ISI-DC system which fails under normal operating conditions provided that it is returned to the factory, transportation prepaid, and our inspection determines it to be defective under the terms of this warranty.

The warranty covers only equipment other than batteries manufactured by Inverter Systems, Inc. and does not extend to transportation, installation or replacement charges, nor does it apply to any other equipment of another manufacturer used in conjunction with ISI equipment. No other warranty expressed or implied exists beyond that included in this statement.

Battery Warranty

Sealed lead calcium batteries carry a 1 year full, 9 year pro-rated limited warranty. Wet nickel cadmium batteries carry a 1 year full, 10 year pro-rated limited warranty.

Important note: Battery warranty is limited to certain environmental, operational and installation limitations (refer to detailed Battery Warranty Terms and Conditions).

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WARRANTY

LIMITED WARRANTY TERMS & CONDITIONS FOR CENTRAL POWER SYSTEMS

WARRANTY: Inverter Systems, Inc. (ISI) ISI-Series central power systems electronic assemblies (except batteries) are warranted against defects in material and workmanship from date of shipment EX-Works for a period of:

ISI-IPS3 Series = One Year
ISI-UFT Series = One Year
ISI-3UFT Series = One Year
ISI-DC Series = One Year
ISI-FTW Series = One Year

ISI's warranty is limited to either repair or replacement of parts and equipment of ***PROPERLY INSTALLED*** ISI Series central power systems which fail under normal operating conditions ***PROVIDED*** that the system is properly packed for road transport and returned transportation prepaid to ISI factory and ISI's inspection determines it to be defective under the terms of this warranty. ***SUCH REPAIR OR REPLACEMENT SHALL BE THE PURCHASER'S EXCLUSIVE REMEDY.***

The warranty covers only equipment other than batteries manufactured, sold and warranted by ISI and does not extend to transportation, installation or replacement charges, nor does it apply to any other equipment of another manufacturer used in conjunction with ISI's ISI Series systems.

ISI's warranty shall be null and void under the following conditions:

a) Damage caused by abuse, misapplication, shipping damage, improper installation, or damage resulting from changes in circuitry or components made by other than authorized ISI personnel or service companies authorized by ISI.
b) Damage due to improper maintenance.
c) Damage resulting from installation(s) in areas with other than normal temperatures. Maximum ambient temperature must not exceed 90° F.
d) Environmental conditions, damages caused by fire and abuse or acts of God such as lightning, explosions, water leaks or acts of war are not covered by the warranty.

Replacement of fuses, pilot lights and lamps, and indicator lights and lamps, are not included in the Warranty. Warranties for batteries used in ISI's AC systems are described in the following paragraph.

Batteries included with the above ISI central power systems shall be warranted as follows:

Type of Battery	Period of repair or replacement without charge	Period or Pro-rata charge for repair or replacement	Annual adjustment charge %
Maintenance free sealed	1 year	9 years	7%
Wet nickel cadmium	1 year	10 years	5%

The period noted above during which repair or replacement is without charge (the "Guarantee Period") shall commence on the date of shipment. The period of pro-rata charge for replacement or repair (the Pro-rata Charge Period) shall commence on the expiration of the Guarantee Period. All warranties set forth herein, whether during the Guarantee Period or the Pro-rata Charge Period, are subject to:

a) The battery having been properly installed and continuously maintained in accordance with recommended practice together with documented history (both as set forth in the ISI installation manual relating to the battery involved and national and local requirements).
b) The average ambient temperature shall not exceed 77°F.
c) Cell temperatures shall not exceed 92°F for more than 30 days annually.
d) Battery service records must be maintained every two months.
e) The batteries have not bee contaminated by any foreign matter.
f) Not more than 300 discharges of 80% or less of the ampere hour capacity are incurred.
g) Batteries must be installed and placed on charge/energized within 120 days of shipment.

Should the battery fail to deliver 80% of its rated capacity or a defect appear in a battery covered by the warranty during the pro-rata charge period, on return of the defective battery transportation prepaid, ISI will repair or replace such battery at a cost equal to the net LIST prices at the time of repair or replacement, reduced by a percentage of such price equal to the product of the number of full years remaining in the warranty period at the time of the failure multiplied by 7% in the case of maintenance free sealed lead acid batteries and 5% in the case of nickel cadmium batteries. Example:

Replacement list price = $100
Pro-rata warranty years remaining = 4
Annual adjustment charge = 7%
$100 less ($100 x .07 x 4) = $72 replacement charge

REPAIR OR REPLACEMENT AT SUCH ADJUSTED PRICE SHALL BE PURCHASER'S EXCLUSIVE REMEDY.

In the event that the unit AC input is de-energized for an extended period, the battery circuit breaker or fuse must be turned off/disengaged so as to eliminate any current drain. The battery warranty will be void if the fuse or circuit breaker is not turned off within 36 hours after the unit is de-energized.

THE ISI SERIES SYSTEMS' WARRANTY AND THE BATTERY WARRANTY MENTIONED ABOVE ARE EXPRESSLY IN LIEU OF, AND THERE ARE NO OTHER EXPRESS OR IMPLIED GUARANTEES OR WARRANTIES INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PURPOSE THAT RELATE TO THE PRODUCTS REFERRED TO HEREIN. IN NO EVENT WILL ISI BE LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES WHICH MAY RESULT FROM THE USE OF THESE PRODUCTS. ISI NEITHER ASSUMES NOR AUTHORIZES ANY OTHER PERSON TO ASSUME FOR IT ANY OTHER LIABILTY IN CONNECTION WITH THE SALE OR RESALE OF SUCH PRODUCTS AND EXCEPT AS STATED IN THEWARRANTIES, ISI SHALL NOT BE LIABLE FOR ANY DEFECT IN, OR BREACH OF, ANY CONTRACT RELATING TO THE QUALITY OF, OR PERFORMANCE OF, THE ISI SERIES SYSTEMS OR BATTERIES UNDER ANY THEORY OF LAW INCLUDING, WITHOUT LIMITATION, CONTRACT, NEGLIGENCE, STRICT LIABILITY OR MISREPRESENTATION.

329 Otter Street, Bristol, PA 19007 USA • Telephone (215) 788-8870 • Fax (215) 788-8873 **ISI**

EXCEL
L.E.D. EXIT SIGN

Premium quality sign ideal for commercial, institutional, and industrial facilities where economy, appearance, and ultimate ease of installation and maintenance are desired. The EXCEL (EXC) is also ideal when a low profile unit needs to meet limited space requirements, and any location requiring an exit sign.

FEATURES

- Universal transformer for 120 or 277 VAC operation, dual voltage.
- Push to test switch and charge rate/power on LED indicator light.
- Premium batteries provide 90 minutes emergency light for red and green signs.
- Remote test option available.
- UV stable, high impact, injection molded, V-O flame resistant thermoplastic housing.
- Universal mounting is standard for end, ceiling or wall application is standard. Canopy included.
- Universal pop out chevron directional arrows can be put back if desired.
- Compact low profile design in neutral finish.
- Easy quick installation.
- Bright, even illumination, with either red or green letters.
- Exceeds NFPA Life Safety Code 70 and 101 illumination requirements.
- Complies with latest standard UL924. ETL listed. Meets Chevron codes.

LED FEATURES

- Ultra bright maintenance free LED light source.
- Premium Ni-Cad battery.
- LED light source consumes only 1.03 watts.
- 95% savings compared to incandescent signs.

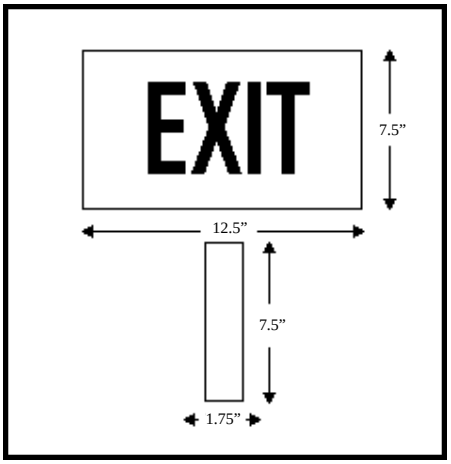
WARRANTY

All EXCEL fixtures are warranted to be free from manufacturing defects and workmanship for period of 10 years. The batteries are pro-rated for a 5 year period when operated at normal ambient temperatures.

SIGN SERIES	OPERATION	LETTER COLOR	# OF FACES	SIGN COLOR	OPTIONS
EXC EXCEL SERIES	AC SP 90 MINUTE BACKUP	R RED G GREEN	U UNIVERSAL	WW WHITE BB BLACK	SEE BELOW

OPTIONS AND ACCESSORIES

BZ	Buzzer
FL	Flasher
DL	Down light
SD	Self Diagnostics
DR	Damp Rated
FBZ	Flasher and Buzzer Interface
FR	Fire Alarm Flasher (24V)
RT	Remote Test Capability (requires remote control)
CP	Cord and Plug (6' Length)
TP	Tamperproof screws
IRT	Infrared Remote Test Control
PEN	6" Pendant Mounting Kit
2CKT	Dual Circuit (specify voltage)



AGENCY APPROVAL

Meets the illumination requirement of NFPA Life Safety Code 101, 5-10.2.2. Certified and tested to UL924. ETL listed.

329 Otter Street, Bristol, PA 19007 • Tele: (215) 788-8870 • Fax: (215) 788-8873 ISI

EXCEL-2

EMERGENCY LIGHT &L.E.D. EXIT SIGN COMBINATION

The EXCEL-2 (EXC2) combo is a great energy and cost saving approach to meeting egress lighting requirements. Commercial, retail and industrial facilities that require battery back-up emergency exit signs as well as emergency lighting.

FEATURES

- Combo units include all the features of the EXCEL emergency lights and exit signs.
- Injection molded, V-O flame retardant, high impact, thermoplastic housing available in black or white.
- Available with high powered 5 watt, MR-16 halogen lamps.
- Meets or exceeds all state and local codes, tested and certified to UL924, ETL listed.
- Ultra-bright LED lamps consume less than 2 watts.
- LED lamp life is rated at 25 years.
- Utilizes a premium Ni-cad battery.

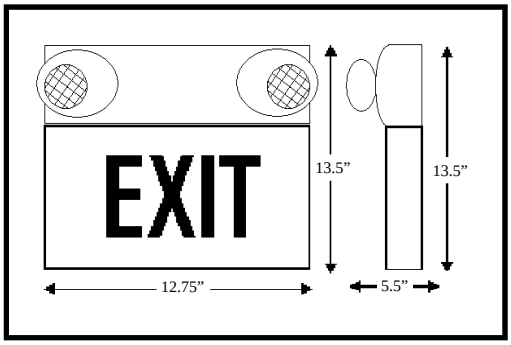
OPERATION

Whenever normal utility power fails, the internal solid state transfer switch automatically connects the battery to the lamp heads providing a minimum of 90 minutes of light. When normal utility power is restored, recharging of the battery is initiated by an automatic, solid state, two-rate charger, which includes current limiting and temperature compensation to assure that optimum recharge is achieved. A fully discharged battery will be fully recharged within 12 hours.

SIGN SERIES	WATTS	HEAD TYPE	COLOR	# OF FACES	SIGN COLOR
EXC2 EXCELSERIES	11 27 18 32	X MR 16	R RED G GREEN	U UNIVERSAL	W WHITE B BLACK

WARRANTY

The EXCEL fixture and battery are warranted to be free from defects for a period of one year from date of purchase. The battery is covered by a 5 year pro-rated warranty.



AGENCY APPROVAL

Meets the illumination requirement of NFPA Life Safety Code 101, 5-10.2.2. Certified and tested to UL924. ETL listed.

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NAVIGATOR

EMERGENCY LIGHT & L.E.D. EXIT SIGN COMBINATION

Commercial, retail, and industrial facilities that require battery back-up emergency exit signs, as well as emergency lighting. The NAV combo is a great energy and cost saving approach to meeting egress lighting requirements.

FEATURES

- Compact, low profile design in neutral finish.
- Universal mounting canopy for side or top installation.
- Built in conduit mounting feature is standard..
- Two fully adjustable, glare free lighting heads with 5.6 watt lamps standard.
- Universal snap in and out chevrons meet and exceed state and local codes.
- Louvered down lighting.
- Completely self contained.
- Easy installation.
- Injection molded, V-O flame retardant, high impact, thermoplastic housing.
- Automatic low voltage disconnect (LVD) protects battery from deep discharge.
- Environmentally coated, solid state charger.
- Push to test switch.
- Universal transformer for both 120V and 277V operation.

LED FEATURE

- Super bright L.E.D. lamps consume only 3 watts.
- Long 25 year rated L.E.D. lamp service life.
- Premium Ni-Cad maintenance free battery with 10 year expected life.

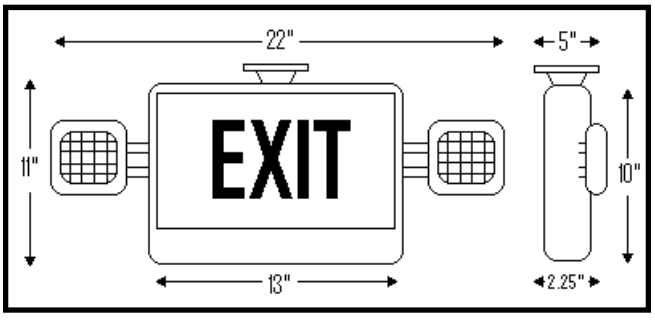
WARRANTY

The NAVIGATOR fixture and battery are warranted to be free from defects for a period of one year from date of purchase. The battery is covered by a 10 year pro-rated warranty.

SERIES	MOUTING	LETTER COLOR	# OF FACES	SIGN COLOR
NAV NAVIGATOR	U UNIVERSAL	R RED G GREEN	U UNIVERSAL	W WHITE B BLACK

OPTIONS AND ACCESSORIES

DL	Down light
SD	Self Diagnostics
DR	Damp Rated
RT	Remote Test Capability (requires remote control)
CP	Cord and Plug (6’ Length)
IRT	Infrared Remote Test Control
PEN	6” Pendant Mounting Kit



AGENCY APPROVAL

Meets the illumination requirement of
NFPA Life Safety Code 101, 5-10.2.2.
Certified and tested to U.L. 924. ETL listed.

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MITIGATOR
ALUMINUM DIECAST L.E.D. EXIT SIGN

The MITIGATOR (MIT) is a premium architectural quality sign that is ideal for commercial, institutional, and industrial facilities. It is constructed of quality die-cast aluminum and pleases the eye. Available in all white, all black, or a brushed aluminum face on a black body.

FEATURES

- Universal transformer for 120 or 277 VAC operation, dual voltage.
- Simple installation / Universal with removable "CHEVRON" arrows.
- Ultra bright low power L.E.D. light source.
- Red or green letters evenly illuminated.
- Isolated short circuit and voltage protection circuit.
- AC only or optional self powered with N-Cad batteries.
- L.E.D.'s shall carry a limited lifetime warranty / 5 years on Ni-Cad batteries.
- L.E.D. light source 1.03 watts
- UL 924 listed, NFPA 101 Approved, ETL laboratories.
- 95% savings compared to incandescent signs.

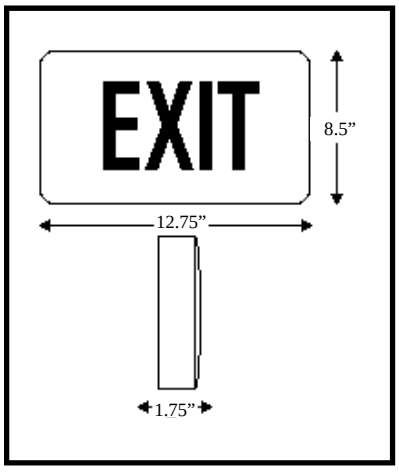
WARRANTY

All MITIGATOR fixtures are warranted to be free from manufacturing defects and workmanship for period of 5 years. The batteries are pro-rated for a 5 year period when operated at normal ambient temperatures.

SIGN SERIES	OPERATION	LETTER COLOR	# OF FACES	SIGN COLOR	OPTIONS
MIT MITIGATOR SERIES	AC SP 90 MINUTE BACKUP	R RED G GREEN	1 2	WW WHITE BB BLACK BAL BLACK W/ BRUSHED ALUM. FACE	SEE BELOW

OPTIONS AND ACCESSORIES

AL	Brushed Aluminum Housing (see pricing)
BZ	Buzzer
FL	Flasher
SD	Self Diagnostics
FBZ	Flasher and Buzzer Interface



AGENCY APPROVAL

Meets the illumination requirement of NFPA Life Safety Code 101, 5-10.2.2. Certified and tested to UL924. ETL listed.

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MASTER-REMOTE
LOW LEVEL L.E.D. EXIT SIGNS

Low level exit signs meet new code requirements for signage near the floor and adjacent to the egress doorway. This system consists of two main components. A master sign above the door and a remote sign near the base of the door. The sign at the base of the door can be either surface or recessed mounted. MITIGATOR, STARK, and EXCEL series signs can be utilized in this system. All of the energy and maintenance characteristics of this LED configuration make for an extremely easy system to install and maintain.

FEATURES

- L.E.D. signs are available with red or green lettering and meet the illumination requirements of NFPA Life Safety Codes.
- Low 3.5 watt total sign consumption exceeds Energy Star requirements.
- 95% or greater energy savings when compared to incandescent signs.
- Master units are available with plastic, steel, or cast aluminum housings.
- Remote units are available either as a surface mount or recessed housing fixture.
- Remote unit can be mounted up to 12 feet from the master.
- Universal directional arrow meets new UL924 chevron requirements.
- Dual voltage isolation transformer provides for 120 /277 volt circuits.
- Push to test switch with LED indicator light is standard on all battery back-up signs.
- Premium NiCad batteries provide 90 minutes of emergency illumination.

MASTER

REMOTE OPTIONS

WARRANTY

Warranted to be free from defects for 5 years.
Batteries are pro-rated for a 5 year period.

ORDERING INFORMATION:

Master Units refers to the sign above the door or passage way that is powered by the primary circuit.
Remote Units refers to the sign that is powered from the master unit.

MIT Series signs may be utilized as the "Master Unit." This is true of both single and double sided signs with red or green lettering, also on both AC or battery back-up signs. To order a master unit please order as MITMR-…

CK50 (recessed steel housing), EXC, and MIT Series signs can be utilized as "Remote Units." Remote units are single sided signs. Because they are operated from the master unit, it is not necessary to order the "SP" battery back-up option. To order a remote unit please suffix "-RU".

AGENCY APPROVAL

Meets the illumination requirement of
NFPA Life Safety Code 101, 5-10.2.2.
Certified and tested to UL924. ETL listed.

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MITIGATOR-UNIVERSAL

ALUMINUM DIECAST L.E.D. EXIT SIGN WITH SINGLE OR DOUBLE FACE CAPABILITY

Premium architectural quality sign is ideal for commercial, institutional, and industrial facilities. It is constructed of quality die-cast aluminum and pleases the eye. Available in all white, all black, or a brushed aluminum face on a black body. The face plate is curved, producing a sleek appeal.

FEATURES

- Universal transformer for 120 or 277 VAC operation, dual voltage.
- Simple installation / Universal faces with removable "CHEVRON" arrows.
- Ultra bright low power L.E.D. light source.
- Red or green letters evenly illuminated.
- Isolated short circuit and voltage protection circuit.
- AC only or optional self powered with nickel cadmium batteries.
- L.E.D.'s shall carry a limited lifetime warranty / 5 years on Ni-Cad batteries.
- L.E.D. light source 4 watts
- UL 924 listed, NFPA 101 Approved, ETL laboratories.
- All units damp rated.
- 95% savings compared to incandescent signs.
-

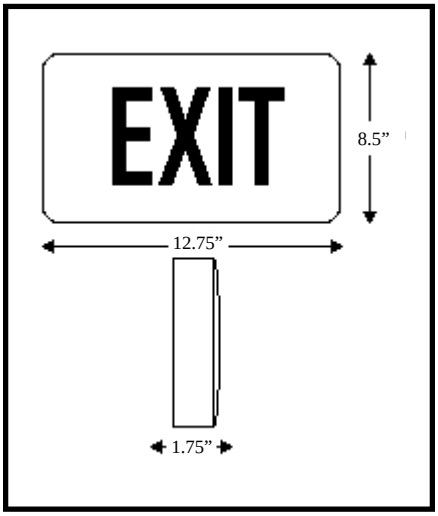
WARRANTY

All MITIGATOR fixtures are warranted to be free from manufacturing defects and workmanship for period of 10 years. The batteries are pro-rated for a 5 year period when operated at normal ambient temperatures.

SIGN SERIES	OPERATION	LETTER COLOR	SIGN COLOR	OPTIONS
MIT-U MITIGATOR UNIVERSAL SERIES	AC SP 90 MINUTE BACKUP	R RED G GREEN	WW WHITE BB BLACK BAL BLACK W/ BRUSHED ALUM. FACE	2CKT Dual Circuit SD Self Diagnostics

The MIT-U is an excellent alternative to traditional die-cast signs. Instead of stocking both single and double face signs, the MIT-U has a "pop-off" back plate that can be replaced with an extra face plate.

Save space and money, by stocking single-faced signs along with extra face plates.



AGENCY APPROVAL

Meets the illumination requirement of NFPA Life Safety Code 101, 5-10.2.2. Certified and tested to U.L. 924. ETL listed.

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STARK
STEEL L.E.D. EXIT SIGN

The STARK (STA) Series features an attractive, contemporary steel housing design. Premium architectural quality makes this series ideal for commercial, institutional, and industrial facilities. Constructed with welded 20 gauge steel and is designed for both durability and economy.

FEATURES

- Universal transformer for 120 or 277 VAC operation, dual voltage.
- Simple installation / Universal with removable "CHEVRON" arrows.
- Ultra bright low power L.E.D. light source.
- Red or green letters evenly illuminated.
- Isolated short circuit and voltage protection circuit.
- AC only or optional self powered with nickel cadmium batteries.
- L.E.D.'s shall carry a limited lifetime warranty / 5 years on Ni-Cad batteries.
- L.E.D. light source 1.03 watts
- UL 924 listed, NFPA 101 Approved, ETL laboratories.
- 95% savings compared to incandescent signs.

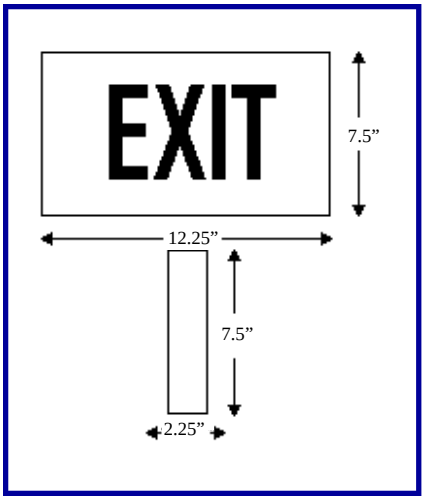
WARRANTY

All STARK fixtures are warranted to be free from manufacturing defects and workmanship for period of 10 years. The batteries are pro-rated for a 5 year period when operated at normal ambient temperatures.

SIGN SERIES	OPERATION	LETTER COLOR	# OF FACES	SIGN COLOR	OPTIONS
STA STARK SERIES	AC SP 90 MINUTE BACKUP	R RED G GREEN	U UNIVERSAL	WW WHITE BB BLACK	SEE BELOW

OPTIONS AND ACCESSORIES

BZ	Buzzer
FL	Flasher
DL	Down light
DR	Damp Rated
RT	Remote Test (requires infrared remote control)
SD	Self Diagnostics
FBZ	Flasher & Buzzer Interface
FR	Fire Alarm Flasher (24 Volt)
CP	6' Cord & Plug



AGENCY APPROVAL

Meets the illumination requirement of NFPA Life Safety Code 101, 5-10.2.2. Certified and tested to UL924. ETL listed.

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PINNACLE
EDGELIT L.E.D. EXIT SIGN

The aesthetically appealing PINNACLE (PINN) edge lit exit sign is available in AC only or self powered units. Energy saving LED's consume less than 3 watts for AC only / less than 8 watts for self powered operation. 20 gauge epoxy coated steel back box. Mounting options include ceiling recessed, wall recessed, wall surface, or ceiling surface mount.

FEATURES

- Clear acrylic panel with polished edges, aluminum or white separate plates supplied with double faced exits.
- Self powered version features sealed maintenance free nickel cadmium battery with 7 year life expectancy.
- AC lockout installation feature and low voltage disconnect.
- AC indicator light and test switch, solid state charging circuitry, for self powered units.

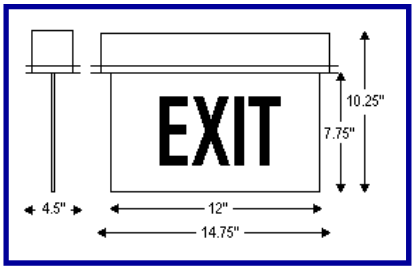
WARRANTY

All PINNACLE fixtures are warranted to be free from manufacturing defects and workmanship for a period of one year. The batteries are pro-rated for a 5 year period when operated at normal ambient temperatures.

SIGN SERIES	LETTER COLOR	OPERATION	MOUNTING	FACES	BACKGROUND	OPTIONS
PINN PINNACLE SERIES	R RED G GREEN	AC SP 90 MINUTE BACKUP	CR CEILING RECESSED WR WALL RECESSED SC SURFACE CEILING SW SURFACE WALL	1 2	C CLEAR W WHITE M MIRROR	SEE BELOW

OPTIONS AND ACCESSORIES

M	Mirror Background
W	White Finish
B	Black Finish
BRZ	Bronze Finish
BR	Polished Brass Finish
BAL	Brushed Aluminum Finish
PAL	Polished Aluminum Finish
BZ	Buzzer
FL	Flasher
RT	Remote Test
SD	Self Diagnostics
FM	Flag Mount



AGENCY APPROVAL

Meets the illumination requirement of NFPA Life Safety Code 101, 5-10.2.2. Certified and tested to UL924. ETL listed.

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ENDUREX-1
SELF-LUMINOUS EXIT SIGN

The ENDUREX-1 (END1) series provides a contemporary design with a rugged, low profile molded thermo-plastic housing. Highly economical, 100% reliable, exit sign… ENDUREX-1 requires, no wiring, batteries, maintenance, or electrical power. It is available in 10 to 20 year life spans. It is suitable for use in hazardous atmospheres and wet locations.

LIGHTING

- Internally illuminated by sealed tritium gas light sources.
- 100% reliable: Requires no electrical power, wiring or batteries, and no maintenance.
- Green light output for maximum visibility in dark conditions. No external light or power is required for activation.
- Lamps guaranteed for up to 20 years of continuous operation.
- Approved for ETL for minimum visibility of 100 ft. in darkness by UL test standards.

CONSTRUCTION

- One-piece ABS thermoplastic injection molded housing only 7/8" thick, with clear polycarbonate window.
- Sealed internal construction prevents unauthorized access to light tubes.
- Legend face is removable, allowing for quick installation or adjustment of stencil face color, with universal field-adjustable arrows.
- Standard finishes are white or black housing, with white lettering and high contrast red, green or black faceplate. Optional finishes include many custom colors.
- Suitable for use in hazardous atmospheres and wet locations.

WARRANTY

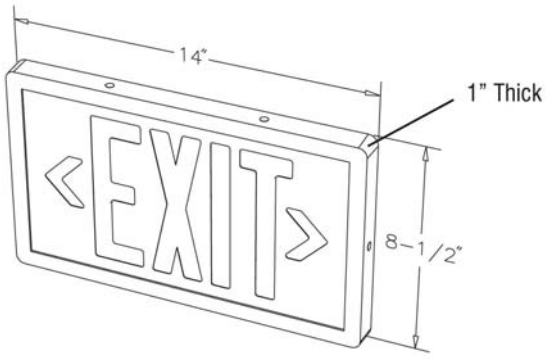
All ENDUREX fixtures carry an unconditional warranty against failure to meet standards of specific illuminated life.

SIGN SERIES	USEFUL LIFE	# OF FACES	FACE COLOR	HOUSING COLOR	OPTIONS
END1 ENDUREX-1 SERIES	10 YEARS 15 YEARS 20 YEARS	1 2	R RED G GREEN B BLACK	W WHITE B BLACK	SEE BELOW

OPTIONS AND ACCESSORIES

P1 12" Pendant Kit
P2 24" Pendant Kit
P3 36" Pendant Kit
P4 48" Pendant Kit
WG16113 Custom Fit Wire Guard

****END2 Models and accessories available until 1/1/2009****



AGENCY APPROVAL

ETL listed, per UL Standard 924 and Life Safety Code NFPA 101 (1991). Meets requirements of National Electrical Code Article 500, Class I and II conditions.

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DEFIANT

WET LOCATION EXIT SIGNS AND COMBINATION UNITS

The DEFIANT exit series is designed with the extremes of environment in mind. The fully gasketed polycarbonate lens and ABS thermoplastic housing allows the DEF Series to be installed in locations that require NEMA 4X protection. Optional weatherproof par36 emergency lighting heads can also be installed on this unit. The DEF series is available configured with high-output LED's in AC only and self-powered operation versions.

EXTERNAL SPECIFICATIONS

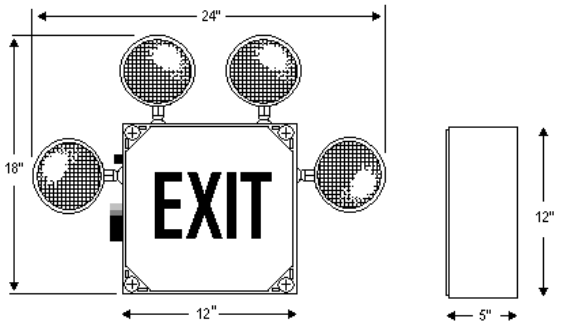
The DEF series housing is constructed from durable, corrosion resistant ABS thermoplastic. The housing is fully gasketed for wet location applications and is supplied standard in a gray finish. Four polycarbonate pressure screws firmly hold the polycarbonate lens in place. Wall, ceiling, or end mount configurations are available. Single or double face versions must be specified. Removable chevron arrows are standard on each unit. The self-powered version comes standard with an external LED status indicator and test switch.

INTERNAL SPECIFICATIONS

AC ONLY: standard 120/277 VAC input
SELF-POWERED: standard self-powered versions use sealed nickel-cadmium batteries to provide a minimum 90 minutes of emergency duration. Maintenance free sealed lead acid battery used when optional emergency heads are ordered. Optional 120 minute duration battery is available. Solid state charger and transfer.

EXTREME CLIMATE DESIGN

The DEF series has been designed to perform in applications where the climate would punish any standard sign. The entire internal cavity of the sign is protected from moisture invasion by an extremely resilient silicone gasket. The liquid gasketing is "hot-bonded" to the lens during the manufacturing process. This procedure eliminates any chance of the gasketing to become dry and pull away from the lens. The gasketing also holds its original form and has "memory retention" so that it effectively and consistently protects the DEF series from moisture. The DEF can also be equipped with an optional thermostatically controlled heater for cold environments. The ABS housing is highly corrosion resistant and will not rust or rot. The molded ABS finish cannot be scraped or scratched away exposing raw metals like standard steel signs.



BATTERY TECHNOLOGY

The DEF-SP-6-27, 6-36, and 6-54 are designed with an internal, maintenance free, valve regulated sealed lead-acid battery providing emergency lighting duration as per specified unit. The DEF-SP is designed with an internal maintenance free, sealed nickel-cadmium battery providing a minimum emergency duration of 90 minutes. An optional 120 minute nickel-cadmium battery is available. Recharge time of the battery is 24 hours. The maximum battery operating temperature is 50º C.

MECHANICAL SPECIFICATIONS

The DEF series housing is constructed from durable, corrosion resistant ABS thermoplastic. The housing is fully gasketed for damp, wet, and NEMA 4X locations with a hot-bonded silicone gasket. Exit face(s) are made from a high clarity, clear polycarbonate that has been painted white on the internal side only, making the unit highly scratch resistant. Field removable chevron arrows are standard on each face. Four polycarbonate screws firmly hold the face to the housing. Optional par36 heads are constructed of high-impact black thermoplastic that has been sealed against moisture infiltration.

CHARGER SPECIFICATIONS

The DEF series utilizes a solid state transfer technology that eliminates relay failure that can be cause by particle build up on the relay. All of the components used in the circuitry are temperature compensated. Status is easily determined via the LED display. A push button test switch allows maintenance personnel to quickly confirm the operational status of the exit on AC fail.

EXIT SIGN ONLY

SIGN SERIES	OPERATION	MOUNTING	LED / # OF FACES	OPTIONS
DEF DEFIANT SERIES	AC SP 90 MINUTE BACKUP	W WALL (NO CANOPY) C CEILING (INSTALLED) E END (INSTALLED)	R1 RED / SINGLE R2 RED / DOUBLE G1 GREEN / SINGLE G2 GREEN / DOUBLE	2CKT DUAL CIRCUIT 120SP 120 MIN. EMER. BZ BUZZER

EXIT SIGN COMBINATION

SIGN SERIES	MOUNTING	LED / # OF FACES	HEADS	OPERATION	OPTIONS
DEF DEFIANT SERIES	W WALL (NO CANOPY) C CEILING (INSTALLED) E END (INSTALLED)	R1 RED / SINGLE R2 RED / DOUBLE G1 GREEN / SINGLE G2 GREEN / DOUBLE	0 NO HEADS 1H ONE HEAD 2H TWO HEADS	6-27 (6V 27W) 6-36 (6V 36W) 6-54 (6V 54W)	2CKT DUAL CIRCUIT 120SP 120 MIN. EMER. BZ BUZZER

LAMP SELECTION

Please see the EGRESSOR Series lamp options.

Certified by ETL or CSA
to UL924 Standards
NEMA 4X

WARRANTY

The DEF Series comes from the factory with an unconditional 5 year product

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ISI

VALUMINA

DIE-CAST VANDAL RESISTANT/WET LOCATION EXIT

The VALUMINA exit series is designed to stand up to high abuse areas such as correctional facilities, schools, apartment complexes and public areas. The VAL series utilizes a long-life neoprene gasket, die-cast aluminum housing and polycarbonate lens that provides maximum durability against vandalism and outdoor elements. An internal heater option with thermostat is available for low temperature installations.

EXTERNAL SPECIFICATIONS

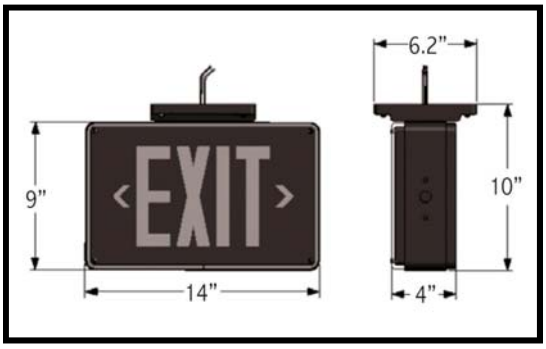
The VAL series housing is constructed from .420" thick, heavy duty die-cast aluminum. The face plates are protected by high abuse clear polycarbonate, which is recessed into the housing. Tamper resistant screws are standard. The housing is fully gasketed for wet location applications and is supplied standard in a black finish. Wall, ceiling, end or universal mount configurations are available. Single or double face versions must be specified. Perforated chevron arrows are standard on each unit. The self-powered version comes standard with an external LED status indicator and test switch.

INTERNAL SPECIFICATIONS

AC ONLY: standard 120/277/347 VAC input
SELF-POWERED: standard self-powered versions use sealed Nickel-Cadmium batteries to provide a minimum 90 minutes of emergency duration. Optional 120 minute duration battery is available. Solid state charger, auto test and transfer are standard.

VANDAL RESISTANT DESIGN

The ultra heavy duty design and appearance of the VAL series warns potential vandals that this is no regular sign. The stencil is protected by a 1/8" thick, impact resistant polycarbonate shield that is recessed into the housing and fastened with 4 tamper resistant screws. The VALENCIA offers a contemporary look and durability like no other.



MECHANICAL SPECIFICATIONS

The VAL series housing is constructed from extra heavy duty cast aluminum with a 1/8" thick polycarbonate shield. Tamperproof screws and field adjustable chevron are standard. The polycarbonate face shield is recessed into the housing making the VALUMINA series one of the most rigid, yet attractive high abuse signs on the market.

AUTOTEST DIAGNOSTIC

The self-powered VALUMINA comes standard with a self diagnostic system. Featuring continuous monitoring of the units main components (battery, charger, transformer, lamps, & LED's) and providing instant visual verification of the status.

BATTERY TECHNOLOGY

The VAL-SP is designed with an internal, maintenance free, sealed Nickel-Cadmium battery providing a minimum emergency duration of 90 minutes. An optional 120 minute Nickel-Cadmium battery is available. Recharge time of the battery is 24 hours. The battery operating temperature range is +32º F - +113º F without internal heater/thermostat option. The minimum operating temperature with internal heater/thermostat option is -40º F.

ELECTRICAL SPECIFICATIONS

The VALUMINA series is configured with high output LED lamps. LED is standard with 120/277 VAC input. All LED version consumes < 5 watts nominal power.

SIGN SERIES	OPERATION	MOUNTING	LED / # OF FACES	HOUSING	OPTIONS
VAL VALUMINA SERIES	AC SP 90 MINUTE BACKUP	W WALL (no canopy) C CEILING E END U UNIVERSAL	R1 RED / SINGLE R2 RED / DOUBLE RU RED / UNIVERSAL G1 GREEN / SINGLE G2 GREEN / DOUBLE GU GREEN / UNIVERSAL	WW WHITE BB BLACK	FL FLASHER BZ BUZZER HT HEATER IRT INFARED REMOTE TEST 120SP 120 MIN. EMER.

WARRANTY

The VAL Series comes from the factory with an unconditional 5 year product warranty.

Certified by ETL or CSA to UL924 Standards
IP 66

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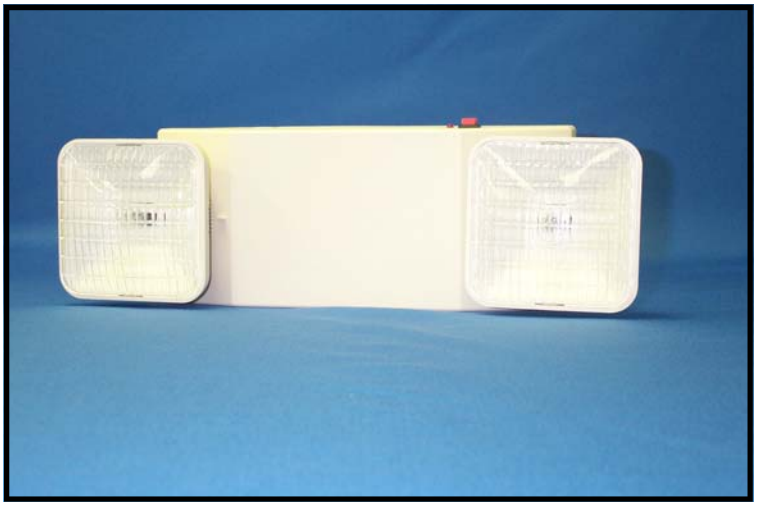
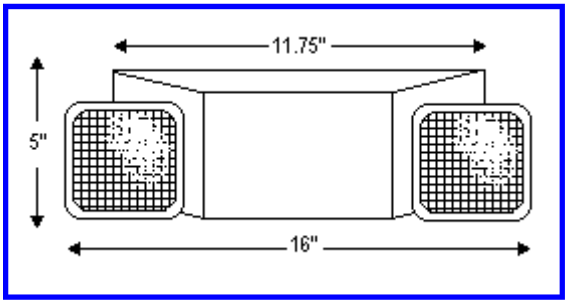
EE-1/EE-2
EMERGENCY LIGHT

Decorative and economical unit with "EZ" install back plate feature has modern appearance and low maintenance. It is ideal for commercial, institutional, and industrial facilities where economy, appearance, and ultimate ease on installation and maintenance are desired. Also ideal when a low profile unit needs to meet limited space requirements, and any space requiring back-up emergency lighting.



FEATURES

- Completely self-contained
- Fully automatic operation
- Compact, low profile design in neutral finish
- Universal mounting plate with "EZ" quick connect for rapid labor saving installation
- Push to test switch
- 6-volt premium grade, pure lead, calcium, maintenance-free battery with 10-year expected life
- Environmentally-coated, solid state charger
- Automatic low voltage disconnect (LVD) protects battery from deep discharge
- Universal transformer for 120 or 277 VAC operation
- Standard with two fully adjustable 5.4 watt, glare-free lighting heads
- Injection molded, V-O flame retardant, high impact, thermoplastic housing
- Charge rate/power on LED light indicator



OPERATION

Whenever normal utility power fails, the internal, solid-state transfer switch automatically connects the internal battery to the two lamp heads, illuminating them for a minimum of 90 minutes.
When utility power is restored, the battery is disconnected from the lamps. Recharging the battery is initiated by a fully automatic solid-state, two-rate charger, which includes current limiting and temperature compensation to assure that the optimum recharging rate, for even a fully discharged battery, will be accomplished within 12 hours.

WARRANTY

Both the EE-1 fixture and the internal battery carry a one year warranty form the time of shipment to be free from defective material and workmanship. The battery is pro-rated for a 10-year period when operated at normal ambient temperatures.

ORDERING INFORMATION

EE-1 - 6 volt 11 watt unit with two 5.4 watt lamps.

EE-2 - 6 volt 22 watt unit with two 5.4 watt lamps. Provides 11 additional watts of remote power.

****For black units, use suffix "B"***

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EE-3
EMERGENCY LIGHT

The ISI EE-3 is a compact, economical unit that is efficient and easy to install. Made of a polycarbonate housing, available in white or black finish, the EE-3 is completely self contained and fully automatic.

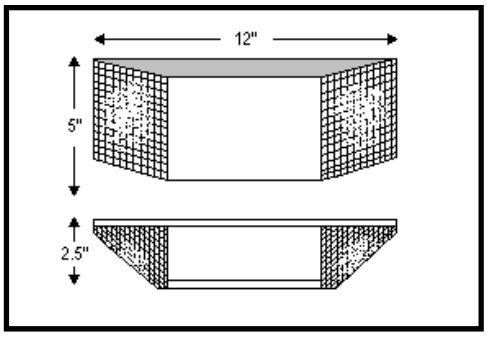
FEATURES

- Completely self-contained
- Fully automatic operation
- Compact, low profile design in neutral finish
- Universal mounting plate with “EZ” quick connect for rapid labor saving installation
- Push to test switch
- 6-volt premium grade, pure lead, calcium, maintenance-free battery with 10-year expected life
- Environmentally-coated, solid state charger
- Automatic low voltage disconnect (LVD) protects battery from deep discharge
- Universal transformer for 120 or 277 VAC operation
- Standard with two fully adjustable 5.4 watt, glare-free lighting heads
- Injection molded, V-O flame retardant, high impact, thermoplastic housing
- Charge rate/power on LED light indicator

Ordering Information: EE-3

Catalog Model #	Emer. Operation	Voltage Input	Lamp Wattage	Battery Voltage	Warranty
EE-3	90 minutes	120V/277	2 x 5.4W	6 volts	Yes
EE-3-B (Black)	90 minutes	120V/277	2 x 5.4W	6 volts	Yes
EE-3-CP (cord)	90 minutes	120V/277	2 x 5.4W	6 volts	Yes

ALSO AVAILABLE IN BLACK.



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ISI

EXCEL-EMER
EMERGENCY LIGHT

Ideal for any location requiring emergency lighting. The EXC-EM Series combines the best of economical operation, a well engineered and attractive appearance, low maintenance and the ultimate in ease of installation. The EXC-EM Series can be installed in combination with EXCEL L.E.D. exit signs.

FEATURES

- Rugged universal dual voltage transformer for both 120 and 277 volt applications.
- Environmentally coated, solid state charging circuit features an automatic low voltage disconnect (LVD), lockout feature to protect against deep discharge and AC brown out.
- Completely self contained & fully automatic operation.
- 6-volt premium grade, pure lead, calcium, maintenance free battery with 10 year expected life.
- Charge rate and power on LED indicator light.
- Easy push to test switch. (remote test option available)
- Injection molded, V-O flame retardant, high impact, thermoplastic housing available in black or white.
- Universal mounting plate featuring convenient knockouts for easy installation with compact low profile design.

OPERATION

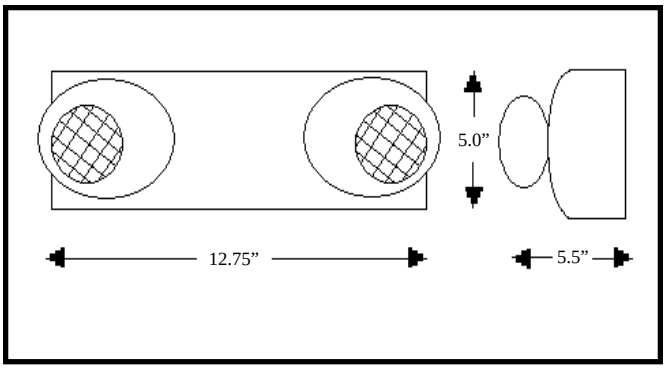
When normal utility power fails, the internal solid state transfer switch automatically connects the battery to the lamp heads and provides a minimum of 90 minutes of light.
When utility power is restored, recharging of the battery is initiated by an automatic, solid state, two-rate charger, which includes current limiting and temperature compensation to assure that optimum recharge is achieved. A fully discharged battery will be fully recharged within 12 hours.

WARRANTY

The EXC-EM fixture and battery are warranted to be free from defects for a period of one year from date of purchase. The battery is covered by a 10 year pro-rated warranty.

UNIT SERIES	WATTS	LAMPS	HOUSING COLOR	OPTIONS
EXC-EM EXCEL SERIES EMERGENCY LIGHT	11 18 27 32	X 5 Watt MR-16 Z 10 Watt MR-16** Y 12 Watt MR-16**	W WHITE B BLACK	SEE BELOW

****10Watt MR-16 Lamps are only available in 18, 27 & 32Watt units**
****12Watt MR-16 Lamps are only available in 27 & 32Watt units.**



OPTIONS AND ACCESSORIES

CP	Cord & Plug
DR	Damp Rated
SD	Self Diagnostics
RT	Remote Test
WG	Wire Guard

AGENCY APPROVAL

Meets the illumination requirement of NFPA Life Safety Code 101, 5-10.2.2. Certified and tested to U.L. 924. ETL listed.

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MINI-EGRESSOR
STEEL EMERGENCY LIGHT

The ISI MINI-EGRESSOR (M-EGR) offers both 6 volt and 12 volt systems that provide up to 54 lamp watts of emergency power. Series M-EGR offers state-of-the-art electronics, economy, and ease of installation as found in all ISI products. Lamps are factory installed, and our battery lockout circuit allows the battery to be connected even when AC power is not available. This eliminates returning to the job site to connect the battery. Series M-EGR housings are gray, white, or black powder coated 20 gauge steel. Lamp heads are high impact flame retardant plastic.

FEATURES

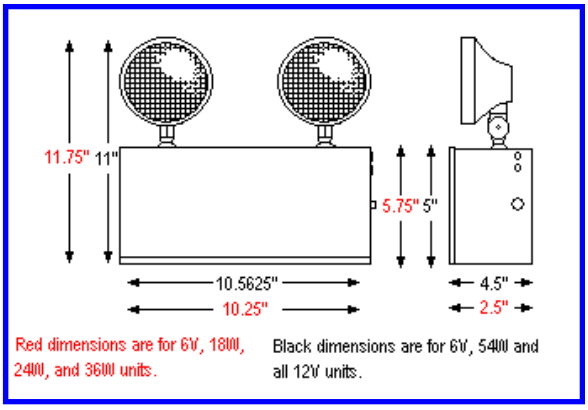
- 12, 18, 27 watts (6 volt) in smaller housing (2.5" deep)
- 27, 36, 54 watts (12 volt) in 4.5" deep housing
- Sealed maintenance free lead batteries.
- Battery lockout circuit
- LVD - low voltage disconnect.
- Temperature compensation and brownout circuit.
- High charge and AC ready LED.
- Dual voltage transformer (120/277VAC)
- Rugged 20-gauge Steel housing.
- 3 year warranty on unit and battery, 5 years additional pro rata on battery.
- Short circuit resistance circuit.

SERIES	COLOR	VOLTAGE	WATTAGE	LAMP HEADS	OPTIONS
M-EGR MINI-EGRESSOR SERIES	2 WHITE 3 BLACK 4 GRAY	6 12	12 18 27 36 54	SEE BELOW	SEE BELOW

LAMPHEADS

00	No Heads	08	6V, 18W SB
01	6V, 5.4W H.I.T	09	6V, 25W SB (METAL HEADS)
02	6V, 7.2W H.I.T.	10	12V, 9W H.I.T.
03	6V, 8W SBH	11	12V, 8W SBH
04	6V, 9W H.I.T	12	12V, 12W SB
05	6V, 9W SB	13	12V, 12W SBH
06	6V, 12W SB	14	12V, 18W SB
07	6V, 12W SBH	15	12V, 25W SB (METAL HEADS)

*** SB = SEALED BEAM
*** SBH = SEALED BEAM HALOGEN



OPTIONS

SD	Self Diagnostics
TP	Tamper Proof
VM	Voltmeter
AM	Ammeter
TD	Time Delay
NC	Ni-Cad Battery

*For more available options, please contact factory.

AGENCY APPROVAL

Meets the illumination requirement of NFPA Life Safety Code 101, 5-10.2.2. Certified and tested to UL924. ETL listed.

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ISI

EGRESSOR
STEEL EMERGENCY LIGHT

The ISI EGRESSOR (EGR) is recommended for 12 volt, 72 watt or 100 watt systems. Series EGR offers state-of-the-art electronics, economy, and ease of installation as found in all ISI products. The lamps are factory installed, and our battery lockout circuit allows the battery to be connected even when AC power is not available. Series EGR housings are gray, white, or black powder coated 20 gauge steel. Lamp heads are high impact flame retardant plastic.

FEATURES

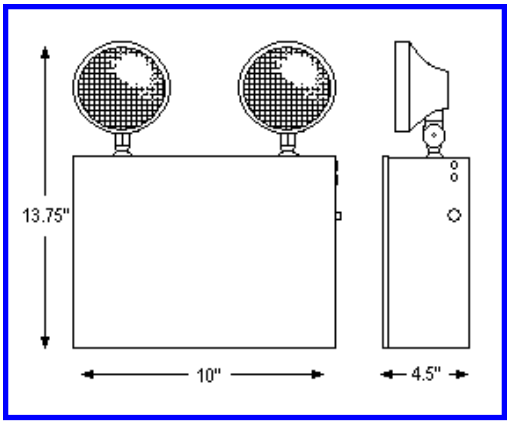
- 6 volt and 12 volt system.
- 27, 36, 54, 72, and 100 watts (6 volt).
- 27, 36, 54, 72, and 100 watts (12 volt).
- Sealed maintenance free lead batteries.
- Battery lockout circuit
- LVD - low voltage disconnect.
- Temperature compensation and brownout circuit.
- High charge and AC ready LED.
- Dual voltage transformer (120/277VAC)
- Rugged 20-gauge steel housing.
- 3 year warranty on unit and battery, 5 years additional pro rata on battery.
- Short circuit resistance circuit.

SERIES	COLOR	VOLTAGE	WATTAGE	LAMP HEADS	OPTIONS
EGR EGRESSOR SERIES	2 WHITE 3 BLACK 4 GRAY	6 12	27 36 54 72 100 125	SEE BELOW	SEE BELOW

LAMPHEADS

00	No Heads	08	6V, 18W SB
01	6V, 5.4W H.I.T	09	6V, 25W SB (METAL HEADS)
02	6V, 7.2W H.I.T.	10	12V, 9W H.I.T.
03	6V, 8W SBH	11	12V, 8W SBH
04	6V, 9W H.I.T	12	12V, 12W SB
05	6V, 9W SB	13	12V, 12W SBH
06	6V, 12W SB	14	12V, 18W SB
07	6V, 12W SBH	15	12V, 25W SB (METAL HEADS)

*** SB = SEALED BEAM
*** SBH = SEALED BEAM HALOGEN



OPTIONS

SD	Self Diagnostics
TP	Tamper Proof
VM	Voltmeter
AM	Ammeter
TD	Time Delay
NC	Ni-Cad Battery

*For more available options, please contact factory.

AGENCY APPROVAL

Meets the illumination requirement of NFPA Life Safety Code 101, 5-10.2.2. Certified and tested to UL924. ETL listed.

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ISI

EGRESSOR-PLUS
STEEL EMERGENCY LIGHT

Rugged construction for the most demanding industrial applications. The ISI EGRESSOR-PLUS (EGR-P) series offers 150, 200, 250, 300 and 400 lamp watts of emergency power in 12 or 24 volts. The EGR-P series has been designed with state of the art electronics including our battery lockout circuit, which allows the battery to be connected to the circuit even when AC power is not available. Lamp heads are factory installed on the unit as just another example of ISI's ease on installation.

FEATURES

- Sealed maintenance free lead batteries.
- Battery lockout circuit.
- LVD - low voltage disconnect.
- Choice of lamp heads.
- Temperature compensation and brownout circuit.
- High charge and AC ready LED.
- Dual voltage transformer (120/277VAC)
- Rugged 20-gauge steel housing.
- Units in white, black, or industrial gray powder finished coating.
- 3 year warranty on unit and battery, 5 years additional pro rata on battery.
- Short circuit resistance circuit.

SERIES	COLOR	VOLTAGE	WATTAGE	LAMP HEADS	OPTIONS
EGR-P EGRESSOR PLUS SERIES	2 WHITE 3 BLACK 4 GRAY	12 24	125 150 200 300 400	SEE BELOW	SEE BLEOW

LAMPHEADS

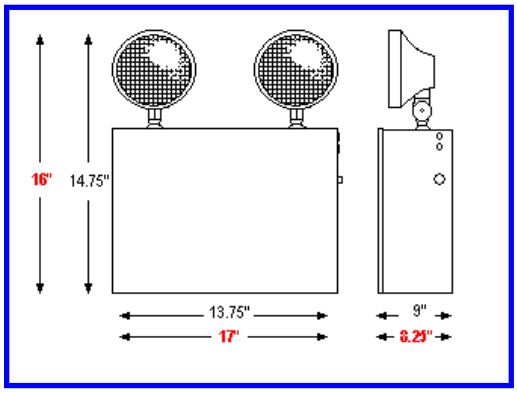
00	No Heads	08	6V, 18W SB
01	6V, 5.4W H.I.T	09	6V, 25W SB (METAL HEADS)
02	6V, 7.2W H.I.T.	10	12V, 9W H.I.T.
03	6V, 8W SBH	11	12V, 8W SBH
04	6V, 9W H.I.T	12	12V, 12W SB
05	6V, 9W SB	13	12V, 12W SBH
06	6V, 12W SB	14	12V, 18W SB
07	6V, 12W SBH	15	12V, 25W SB (METAL HEADS)

*** SB = SEALED BEAM
*** SBH = SEALED BEAM HALOGEN

OPTIONS

SD	Self Diagnostics
TP	Tamper Proof
VM	Voltmeter
AM	Ammeter
TD	Time Delay
NC	Ni-Cad Battery

*For more available options, please contact factory.



Consult factory for dimensions for your application.

AGENCY APPROVAL

Meets the illumination requirement of NFPA Life Safety Code 101, 5-10.2.2. Certified and tested to UL924. ETL listed.

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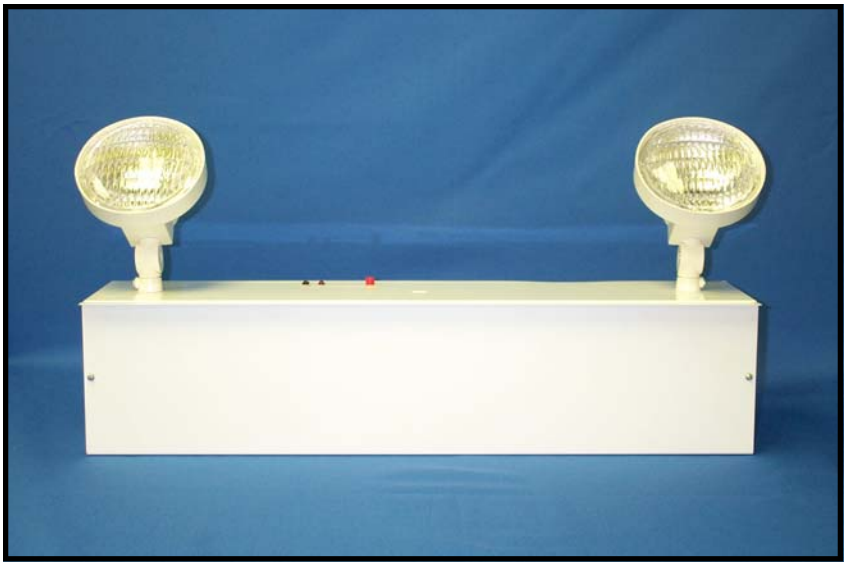
ISI

RECESSED -EGRESSOR
STEEL EMERGENCY LIGHT

The RECESSED-EGRESSOR (R-EGR) offers emergency lighting in applications where wall mounted units are inappropriate. The R-EGR utilizes the existing suspended (T-bar) grid ceilings. This series offers a wide range of wattages in both 6 volt and 12 volts. With 50 lamp wattage and voltage variations, R-EGR can cover all your commercial emergency lighting needs.

FEATURES

- Sealed maintenance free lead batteries.
- Battery lockout circuit.
- LVD - low voltage disconnect.
- Choice of lamp heads.
- High charge and AC ready LED.
- Dual voltage transformer (120/277VAC)
- Rugged 20-gauge steel housing.
- Short circuit resistance.
- Brownout protection.
- Warranted to be free from defects for 3 years.
- Batteries are prorated for 5 years.



SERIES	COLOR	VOLTAGE	WATTAGE	LAMP HEADS	OPTIONS
R-EGR RECESSED EGRESSOR SERIES	2 WHITE 3 BLACK 4 GRAY	6 12	27 36 54 72 100 125	SEE BELOW	SEE BELOW

LAMPHEADS

00	No Heads	08	6V, 18W SB
01	6V, 5.4W H.I.T	09	6V, 25W SB (METAL HEADS)
02	6V, 7.2W H.I.T.	10	12V, 9W H.I.T.
03	6V, 8W SBH	11	12V, 8W SBH
04	6V, 9W H.I.T	12	12V, 12W SB
05	6V, 9W SB	13	12V, 12W SBH
06	6V, 12W SB	14	12V, 18W SB
07	6V, 12W SBH	15	12V, 25W SB (METAL HEADS)

*** SB = SEALED BEAM
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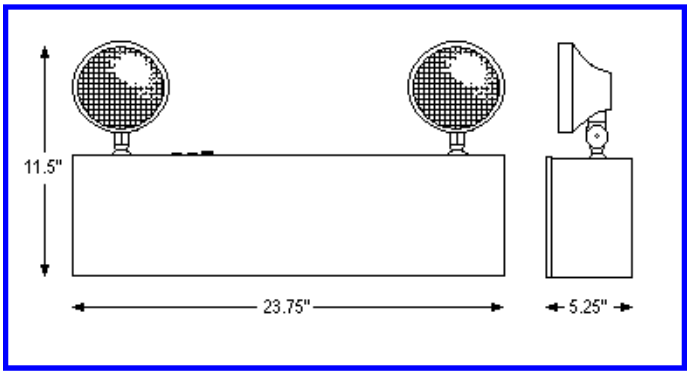

OPTIONS

SD	Self Diagnostics
TP	Tamper Proof
VM	Voltmeter
AM	Ammeter
TD	Time Delay
NC	Ni-Cad Battery

*For more available options, please contact factory.

AGENCY APPROVAL

Meets the illumination requirement of NFPA Life Safety Code 101, 5-10.2.2. Certified and tested to UL924. ETL listed.

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ISI

DEFIANT

NEMA 4X RATED CARLON PVC EMERGENCY LIGHT

The DEFIANT (DEF) series of industrial emergency lighting units are designed to be durable, dependable, and easy to install. The fully gasketed NEMA 4X rated Carlon PVC housing can be used in most damp, wet, and hose down areas. The DEF has been designed with the PulseGuard pulse switching charger. The PulseGuard offers superior performance & energy efficiency versus conventional constant voltage chargers. Traditional top mounted par 36 style heads are standard.

EXTERNAL SPECIFICATIONS

The DEF series is constructed with a durable NEMA 4X rated Carlon PVC cabinet. Industrial gray finish is standard. Emergency lighting heads are molded from high impact thermoplastic in a matching color; par36 heads are standard. Integrated mounting feet ensure proper and secure installation. The front access panel is hinged to allow for trouble free installation and maintenance. External test switch and monitor LED are standard.

LAMP HEAD FEATURES

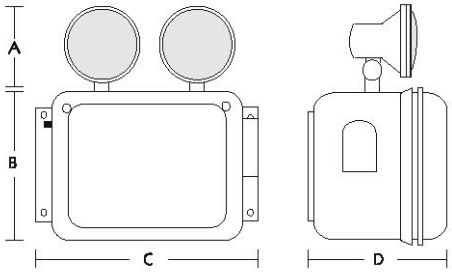
The DEF series is normally supplied with two top mounted par36 style 9W heads. Lamp head styles are constructed of high impact thermoplastic in a color matching the finish of the cabinet (industrial gray is standard). Please note: par36 style food-prep approved lenses are also available when ordering.

BATTERY TECHNOLOGY

The DEF series is designed with a maintenance free, sealed valve regulated lead acid battery that provides a minimum emergency duration of 90 minutes (for the listed rating). Recharge time of the battery is 24 hours. The maximum battery operating temperature is 50º C.

MECHANICAL SPECIFICATIONS

The DEF is constructed from a durable, fully gasketed NEMA 4X rated Carlon PVC housing. The front access panel is hinged for trouble-free installation and maintenance. Four integrated mounting feet ensure proper, secure, and accurate wall or ceiling installation onto most surfaces. The DEF is supplied standard in an industrial gray Carlon PVC finish. External test switch and monitor LED standard.



WATTAGE	A	B	C	D
27W - 36W	6.2”	8”	10”	5”
54W - 72W	6.2”	10”	12”	7”
100W - 125W	6.2”	12”	14”	7”

CHARGER SPECIFICATIONS

The DEF series utilizes a pulse switching charger that is up to 70% more efficient than older constant voltage chargers. The charger is a fully automatic current limited charger with solid state line-latched low voltage disconnect protection. All components used in the circuitry are temperature compensated. The charger also has brownout and short circuit protection. Charger status is easily determined via a dual diagnostic LED display which indicates AC/ON and High Charge. An external push button test switch allows maintenance personnel to quickly determine the operational status of the unit and lamp load.

LAMP SELECTION

00	No Heads	08	6V, 18W SB
01	6V, 5.4W H.I.T	09	6V, 25W SB (METAL HEADS)
02	6V, 7.2W H.I.T.	10	12V, 9W H.I.T.
03	6V, 8W SBH	11	12V, 8W SBH
04	6V, 9W H.I.T	12	12V, 12W SB
05	6V, 9W SB	13	12V, 12W SBH
06	6V, 12W SB	14	12V, 18W SB
07	6V, 12W SBH	15	12V, 25W SB (METAL HEADS)

SIGN SERIES	OPERATION	CAPACITY	HEADS	LAMP TYPE	OPTIONS
DEF DEFIANT SERIES	6 (volt DC) 12 (volt DC)	27 (6 volt only) 36 54 72 100	1H ONE HEAD 2H TWO HEADS	SEE ABOVE	SD SELF DIAGNOSTICS VM VOLTMETER AM AMMETER TD TIME DELAY (SPECIFY) FP FOOD PREP LENS

EX: DEF-6-54-2H-07-VM
DESC: Defiant Series, 6 volt, 54 watt, two lamp heads, 6V, 12W sealed beam halogen bulbs, Voltmeter

WARRANTY

The DEF Series comes from the factory with an unconditional 5 year product warranty.

Certified by ETL or CSA
to UL924 Standards
NEMA 4X

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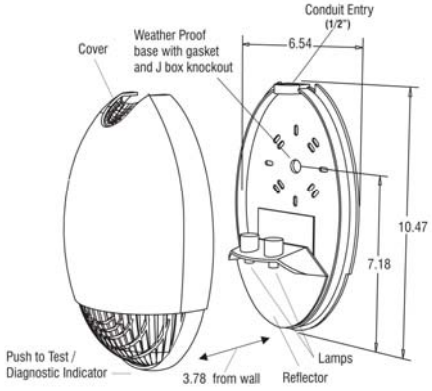
ISI

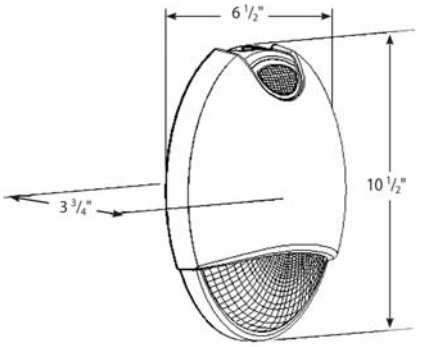
ELLIPTICA
ARCHITECTURAL OUTDOOR EMERGENCY

The ELLIPTICA (EL) Series Emergency Light provides an attractive solution to applications that require low profile egress emergency lighting with rugged durability and good looks. Constructed of die-cast aluminum with a polycarbonate refractor and finished epoxy powder coat, the ELLIPTICA is gasket sealed and ready for use in both indoor and outdoor applications.

FEATURES
- Wet location listed for indoor or outdoor applications 32° - 122° F
- Optional Cold temperature package for -4° - 122° F applications
- Rugged die-cast aluminum construction
- Durable powder coat finish available in Bronze, White, Black and Brushed Aluminum
- Snap fit assembly with vandal resistant latch clips; no visible hardware
- Gasket sealed to suit universal junction boxes
- Conduit entry provided on top of unit
- Available as a 6 volt DC remote fixture
- UV stabilized polycarbonate refractor resists yellowing and provides uniform distribution
- Two 6 watt high output Xenon lamps for superior illumination
- Optional decorative colored night light
- Integral push-to-test switch

ELECTRONICS
- Self Test / Self Diagnostic circuit is provided as standard thereby reducing manual testing obligations
- Easily visible Bi-Color LED diagnostic indicator
- Automated, 28 day, self test checks lamp, battery and electronic circuitry over a short one minute test. Extended 30 minute emergency duration tests are automatically conducted every six months
- Premium long life high temperature rated Nickel Cadmium battery
- Sealed externally accessible test switch for manual momentary test operation
- Field selectable 120 or 277 VAC input
- Brownout sensing assures emergency illumination during periods of low line voltage
- Self-compensating solid state Constant Current Charger provides extended float life and rapid recharge
- Zero current LVCO ensures positive charge acceptance following an extended discharge
- Listed UL 924 Damp and Wet locations





SIGN SERIES	HOUSING	NIGHT LIGHT	OPTIONS
EL6 SELF-POWERED ELR 6 VOLT DC 12 WATT REMOTE (2-6 watt lamps)	B BLACK W WHITE BRZ BRONZE BAL BRUSHED ALUMINUM	NLW WHITE LED NLG GREEN LED NLA AMBER LED NLB BLUE LED	CT COLD TEMP OPERATION (-4° F)

WARRANTY
The Elliptica comes from the factory with a three year limited warranty.

AGENCY APPROVAL
ETL listed, per UL Standard 924 and Life Safety Code NFPA 101 (1991). Meets requirements of National Electrical Code Article 500, Class I and II conditions.

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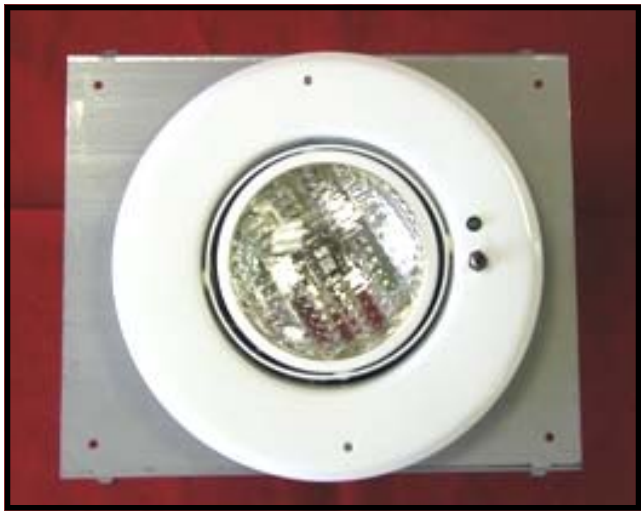
GIMBAL
EMERGENCY LIGHT

The RECESSED-GIMBAL (R-GIM) is designed to be installed within the sheetrock or drop ceiling and blends inconspicuously with other existing recessed lighting fixtures. The GIMBAL mounted lamp permits directional lighting and is adjustable to 45 degrees on two planes. Standard finish is white. Available as complete emergency unit, or as a remote.

FEATURES

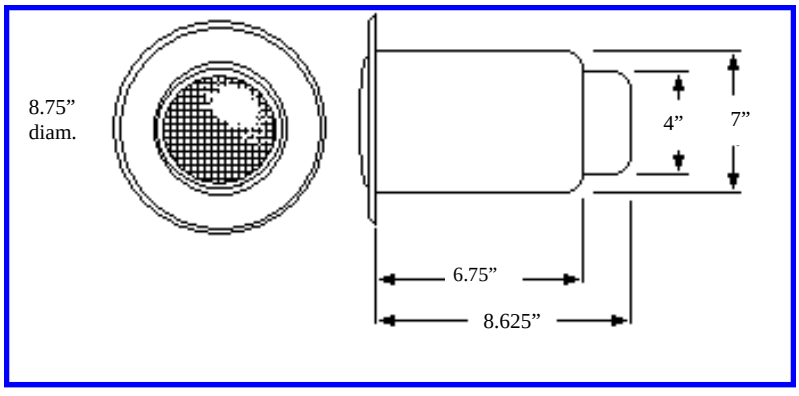


- 6 volt, 8 watt halogen lamp standard.
- U.L. approved for use in insulated ceilings.
- Steel housing.
- Electronics and battery are mounted in a removable bracket.
- Sealed maintenance free lead battery.
- Solid state charging circuit.
- 120/277 VAC Input, 60 Hz, 8W.
- 24 hour recharge after 90 min. discharge.
- Automatic brown out protection.
- Low voltage disconnect (LVD) protects battery from deep discharge.
- Short circuit and overload protection on DC output circuit.

SERIES	COLOR	VOLTAGE	WATTAGE	OPTIONS
R-GIM RECESSED GIMBAL	2 WHITE	6	8	REM REMOTE

Lamp Options

01	6V, 5.4W H.I.T	06	6V, 12W SB
02	6V, 7.2W H.I.T	07	6V, 12W SBH
03	6V, 8W SBH		
04	6V, 9W H.I.T		
05	6V, 9W SB		



Warranty

The fixture is warranted to be free from defects for 2 years. The battery has a 5 year, prorated warranty.

Agency Approval

Meets the illumination requirement of NFPA Life Safety Code 101, 5-10.2.2.
Certified and tested to standard UL924. UL listed and meets NEC and OSHA codes.

329 Otter Street, Bristol, PA 19007 • Tele: (215) 788-8870 • Fax: (215) 788-8873

ISI

ISI offers a full assortment of both plastic, metal and NEMA 4X rated remote lamp heads. They are available in both white and black, 6 volt and 12 volt. All remote lamp head assemblies are available for outdoor use with a weatherproof option.

REMOTE PLASTIC LAMPHEADS

ORDERING GUIDE:

MODEL NUMBER	DESCRIPTION
EXC-RPL-6-X	Excel head, 6 volt, 5 watt MR-16 Lamp w/ mounting plate
EXC-2RPL-6-X	2H Excel, 6 volt, 5 watt MR-16 Lamps w/ mounting plate
EXC-RPL-6-X-WP	Excel head, 6 volt, 5 watt MR-16, w/ mtg. plate, weatherproof
EXC-2RPL-6-X-WP	2H Excel, 6 volt, 5 watt MR-16, w/ mtg. plate, weatherproof
RPL-6-7.2-18	Plastic, 6 volt, 7.2 watt, high intensity tungsten (PAR 18)
RPL-6-7.2-36	Plastic, 6 volt, 7.2 watt, high intensity tungsten (PAR 36)
RPL-6-8-SB	Plastic, 6 volt, 8 watt, sealed beam
RPL-6-8-SBH	Plastic, 6 volt, 8 watt, sealed beam halogen
RPL-6-9 (HIT-Par36)	Plastic, 6 volt, 9 watt, high intensity tungsten
RPL-6-12-SB	Plastic, 6 volt, 12 watt, sealed beam
RPL-6-12-SBH	Plastic, 6 volt, 12 watt, sealed beam halogen
RPL-6-18-SB	Plastic, 6 volt, 18 watt, sealed beam
RPL-12-9 (HIT-Par36)	Plastic, 12 volt, 9 watt, high intensity tungsten
RPL-12-12-SB	Plastic, 12 volt, 12 watt, sealed beam
RPL-12-12-SBH	Plastic, 12 volt, 12 watt, sealed beam halogen
RPL-12-18 (HIT-Par36)	Plastic, 12 volt, 18 watt, sealed beam
RPL-12-18-SB	Plastic, 12 volt, 18 watt, sealed beam halogen

REMOTE METAL LAMPHEADS

ORDERING GUIDE:

MODEL NUMBER	DESCRIPTION
RML-6-8-SB/SBH	Metal, 6 volt, 8 watt, sealed beam or sealed beam halogen
RML-6-9	Metal, 6 volt, 9 watt, high intensity tungsten
RML-6-12-SB/SBH	Metal, 6 volt, 12 watt, sealed beam or sealed beam halogen
RML-12-9	Metal, 12 volt, 9 watt, high intensity tungsten
RML-12-12-SB/SBH	Metal, 12 volt, 12 watt, sealed beam or sealed beam halogen

NEMA 4X REMOTE PLASTIC LAMPHEADS

ORDERING GUIDE:

MODEL NUMBER	DESCRIPTION
NRPL-6-9	Plastic, NEMA 4X rated, 6 volt, 9 watt, high intensity tungsten
NRPL-12-9	Plastic, NEMA 4X rated, 12 volt, 9 watt, H.I.T

** For two and three remote heads per unit add prefix “2” or “3” to part number.

OPTIONS

B Black
WP Weatherproof

329 Otter Street, Bristol, PA 19007 • Tele: (215) 788-8870 • Fax: (215) 788-8873 ISI

ISI offers several different dimensions of wire guards to protect exit signs or emergency lights from balls and vandalism. ISI also offers wet location domes to protect against moisture and weather related atmospheres.

MODEL	HEIGHT	WIDTH	DEPTH
WG29810	29	8	10
WG282110	28	21	10
WG20179	20	17	9
WG17177	17	17	7
WG15146	15	14	6
WG14.5610.5	14.5	6	10.5
WG1410.7514	14	10.75	14
WG14104.5	14	10	4.5
WG13.51216.5	13.5	12	16.5
WG121216	12	12	16
WG1299	12	9	9
WG868	8	6	8
WG686	6	8	6
WG16113	16	11	3

****Custom wire guards are available for special applications. Consult factory.***

The domes are for use with L.E.D. signs including the Excel, Stark, and Mitigator Series. Each dome comes with a rubber gasket to fit between the dome and the wall, therefore completely sealing all moisture from inside the dome.

WLBUB-E-W Wet location dome for Excel-EM unit.

WLBUB-C-W Wet location dome for Excel-2 unit.

WLBUB-S-W Excel, Mitigator & Stark Series exits.

WLBUB-EM Mon-Emer, EE-1/2 & 3 emergency units.

WLBUB-EX Wet location dome for Monarch exits.

WLBUB-COM Mon-Combo and Navigator exits.

NOTE: Additional domes available by special order.

FB Series
FLUORESCENT BALLAST

Fluorescent emergency ballasts are designed to operate most single or bi-pin tubular lamps, as well as 2-pin or 4-pin compact fluorescent lamps including U-shaped, HO, VHO, circuline, energy saving, twin-tube, double twin-tube (quad), triple twin-tube, long compact, and 2D lamps. They are compatible with most 1-, 2-, 3-, and 4-lamp electronic, standard energy saving and dimming AC ballasts, as well as with energy management systems such as occupancy detectors and photo sensors. Products are available for indoor/dry, damp and hazardous location fixtures, and may be modified to accommodate special voltages, line frequencies and longer runtimes.

FEATURES

- Long life, high temperature Ni-Cad battery
- Long life L.E.D. charge light
- Dual voltage 120/277V, 60 Hz
- Vandal Resistant
- Test switch provided
- Painted steel case
- Meets or exceeds all national electrical code and life safety code emergency lighting requirements
- Damp location rated

EMERGENCY BALLAST LINEAR FLUORESCENT

FB-0	Operates one 2’-4’ T8-T12 lamp
FB-1	Operates one 2’-4’ T8-T12 lamp Operates one/two 2’-4’ T8-T12 lamps, HO or VHO fluorescent lamps
FB-2	Operates one 2’-8’ T8-T12 lamp, HO or VHO fluorescent lamps, parallel operation fluorescent emergency ballast
FB-3	Full lumen output, operates one 2’-8’, or two 2’-4’ T8-T12 lamps
FB-CP1	Operates 2 Pin Lamps in recessed applications
FB-CP2	Operates 4 Pin Lamps in recessed applications

ACCESSORIES

TMK-80 EMERGENCY BATTERY PACK
For use when the unit is mounted on top of fixture. The TMK-80 covers the wiring that goes from the battery pack into the fixture.

TBMK-DL/1-160 EMERGENCY BATTERY PACK OPTION
For use when the battery pack cannot be mounted on the light fixture. The battery pack is mounted in the TBMK, then mounted on the ceiling grid.

RTK REMOTE TEST KIT
The remote test kit allows for remote mounting of the test switch and indicator light. The kit consist of a 3” section of flex, junction box, and cover.

LAMP COMPATIBILITY CHART

MODEL	FB-CP	FB-0	FB-1	FB-2	FB-3
Lumens	650	500	700	1400	3000
Linear Lamps	*Number of Lamps Supported*				
2’-4’ Rapid, Instant, or Energy Savings, T8-T12		1	1	1	1
2’-8’ Rapid, Instant, or Energy Savings, T8-T12, HO, VHO			2	2	2
2’-8’ Rapid, Instant, or Energy Savings, T8-T12, HO, VHO			1	1	1
20W - 40W Circline		1	1	1	1
20W - 40W Circline			2	2	2
Compact Lamps	*Number of Lamps Supported*				
13, 18, 26(4-pin)	1	1	1	1	1
13W - 42W Twin, Quad or Triple (4-pin)	1	1	1	1	1
40W Biax			1	1	1
40W Biax					2
50W Biax			1	1	1
50W Biax			1	1	1

Other Lamp Types May Operate With These Ballasts.
Please Contact Factory For Compatibility

UL 924 LISTED

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ISI