IMP-M Series
Modified Sine Wave

Catalog #	
Date:	
Prepared By:	
Type:	
Project Name:	
Comment:	

System Overview

The IMP-M series lighting inverter from IEP Systems is designed to provide 120 VAC 60hz power to emergency lighting in the event of a power failure or brownout situation.

Constructed with heavy duty steel coated in white powder coat paint, the IMP-M is housed in a variety of cabinet configurations.

The line voltage output allows the remote fixture to be located up to 1000 feet away from the unit.

Each systems is designed with on-field selection of wires to ensure an easy installation.

IMP-M series inverter employs sealed, maintenance-free* VRLA batteries with a design life of 10 years per battery manufacturer guidelines.

Product is tested and listed UL924

*VRLA do not need to be watered. Periodic checks, coupled with standard record keeping and maintenance of the inverter would ensure the longevity of the battery module.

Operating Parameters

Operating temperature: 32F (0C) – 104F (40C)
Running time: minimum of 90 minutes
at rated capacity.
Power Factor: .9 leading to .9 lagging
Inverter efficency: >85%

*we recommend that only Energy Star recognized compact fluorescent or LED lamps be used with this equipment.

IMP-M design will provide full rated VA output from .9 leading to .9 lagging power factor. Loads outside of this power factor will reduce the total output of the unit depending on the va at that power factor.

Theory of Operation

The IMP-M inverter can be operated in three different configurations.

1. Normally Off; The connected loads will only come on when the utility power fails or during test mode.

2. Normally On: The connected loads will always be on. During power failure, the connected load will auto matically transfer to inverter power and remains on

3. Switched/On: The connected loads may be controlled by local switching and can be turned on and off depending on the state of the local switch. In the event of a power failure or during emergency mode, the connected loads automatically switch to inverter power and bypasses the local switch and turns the lights on.

Applications

The IMP-M will operate incandescent, fluorescent and LED lamps with power factor greater than .9

Self ballasted compact fluorescent and repalcement LED lamps may be used but the lamp load should have a power factor of .9 or greater.

Order Information

IMP-M	—		—		—	120V	—	120V
IMP-M Series Modified Sine Wave Lighting Inverter		Capacity 50W 100W		Mounting S= Surface mount T= Ceiling Grid R=Recessed Wall		AC Input		AC Output

IEP Systems • PO Box 20302 Lehigh Valley PA 18002 • tel.:(610) 628 1488 • website: www.IEPSystems.com • e-mail: info@iepsys.com

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Suggested Specification

Furnish and install IEP Systems' Emergency Lighting System known as IMP-M Series with rated capacity of 100 watts. The system shall be listed to UL 924 standard.

Equipment and accessories furnished under the term of this specification shall be the standard product of a single manufacturer and shall be equal in all respects to those supplied by IEP Systems. Catalog numbers and model designations which herein indicate design, quality and the type of materials as well as required operating characteristics. All equipment shall be in compliance with applicable standards and codes.

The connected loads shall be powered normally by utility input and upon failure of the utility power, the load shall automatically by powered by IMP Series Inverter's battery and inverter for a minimum of 90 minutes. Upon restoration of utility power, the system will automatically reconnect the load to the utility power and recharge the battery.

The IMP-M Series Inverter will be capable of powering any combination of incandescent, fluorescent, and LED loads. The combined load on the system cannot exceed the rated power rating.

The IMP-M Series Inverter will automatically revert to emergency inverter operation in the event the average utility AC voltage fall below 85% of the nominal line voltage.

During emergency operation, output voltage will be within +/- 5% of nominal at full load for the entire duration of the specific discharge period.

During emergency operation, the system will be powered by sealed, recombination batteries. The batteries will be encased in a high impact, heat resistant container with a permanently sealed cover. The battery will have a minimum design service life of no less than 10 years.

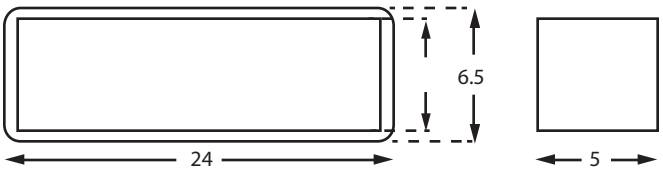
A low voltage disconnect circuit designed to reduce battery discharge during extended power outages and will disconnect the inverter when the battery voltage drops below acceptable level.

The system will have a manual testing switch for manual testing, AC on, Charging and Emergency power pilot lights for system status.

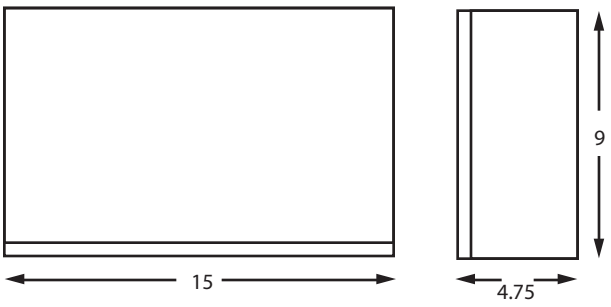
Dimensions

IMP-M-S	15”W X 4.75”D x 9”H
IMP-M-T	24”W X 5”D x 6.5”H
IMP-M-R	17.5”W X 4.5”D x 11.5”H

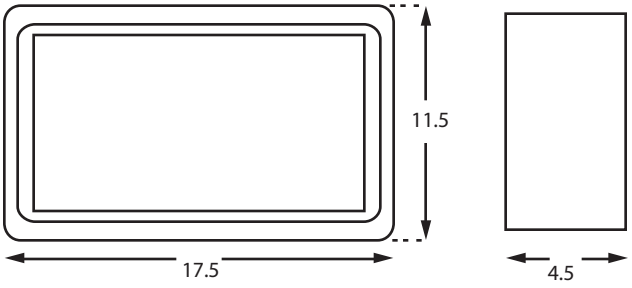
T Grid



Surface Mount



Recessed Wall



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