

PROJECT NAME:	APPROVED BY:
CATALOG NO:	TYPE NO:

# LITEMINDER - LM Series Inverter

Single Phase 1,000VA - 12,500VA

Evenlite's LiteMinder Central Inverter System provides an innovative Emergency Lighting solution for today's complex energy saving systems, light sources and maintenance requirements. The LiteMinder represents the pinnacle of engineering excellence with features not found in the traditional systems currently available.

## Description

- **Modularity:** LiteMinder features unique inverter modules available in increments from 1,000VA to 12,500VA capacities (see ordering guide). Modules are interconnected to build the required system capacity, and can even be field upgraded to increase system sizes!
- **Control Features:** A keypad and LCD display provides user interface and extensive status diagnostics. Self test, Self-Diagnostics, in compliance with UL 924, is field configurable.
- **Web Site Monitoring:** Unique web interface constantly monitors the system status and records all essential data. Users can log on, view, interact and download records as needed. The factory can also monitor, diagnose remotely.
- **Diagnostics:** In addition to Self-test, Self-Diagnostics, LiteMinder also includes unique startup diagnostics to aid in installation and maintenance: eight individual startup alarms (Communications, Set-Up Conflict, Low Battery, Back-feed, Transfer/AC Fuse, Short/Overload, Miswire, Incorrect AC Input) eight individual Charger Alarms and eight individual Inverter Alarms.

## Features

- Modular inverter allows operation for single phase operation
  - Automatic restart upon utility power return, no need to manually reset the system
  - Input circuit breaker is provided sized to system rating
  - Monthly and the annual 90 minute test can be programmed by the user for a specific date and time to ensure NFPA Code Compliance
  - Up to 1000 events stored in the memory log on a "FIFO" basis, and is easily accessible through the MMI (Man-Machine Interface) Panel
  - MMI consists of a 5 button keypad for easy menu navigation
  - A 4x20 backlit White display with heads-up LED's allow for a quick diagnosis of the system status and alarms
  - Five LED indicators provide the status of the Inverter, Charger, AC present, Ready, and Switched Load (if provided with Switched Output Circuit Breakers)
  - An additional six LED indicators provide the alarm status for Alarm Summary, Bypass (if equipped with Maintenance Bypass option), CB Trip, Startup Fault, Charger Fault, and Inverter Fault
  - A dedicated System Test button is provided for a user initiated 30 second on demand test
  - An Alarm On/Off LED is provided to indicate that an alarm is present.
  - A dedicated Alarm Silence On/Off push button allows the user to silence the audible alarm
  - SD card slot allows the user to download all Test, Event and Alarm Logs
  - The Meter Menu allows the user to access the Input and Output Voltages, Output Current, Output VA, Battery Voltage, Battery Current, Battery Power, Temperature, System Days, Inverter minutes and Inverter Events
- The inverter and battery cabinets are constructed from 14 gauge CRS and are powder painted with no visible hardware



- Internally, the inverter has all galvanized or painted steel parts and shelves to resist corrosion and provide high durability and longevity
- Installer friendly front mounted battery terminals for easier and faster installation
- Three Rate Charger circuit is fully temperature compensated for added reliability

## Specifications

- PWM MOSFET and IGBT ( Model Dependant) Inverter provide Pure Sine Wave output with less than 3% THD, and fully compatible with LED Lighting Loads
- Fast transfer for H.I.D. compatibility ensures smooth operation of combined lighting loads, transfers in less than 2 mS
- Less than 3% THD, load power factor 0.5 Lag to 0.5 Lead, 98% efficient in standby mode
- Automatic Low Voltage Disconnect (LVD) set at 1.67 VPC
- Shorted circuit protected to 65KAIC tested and approved to UL 6180-5-1 standard
- Crest factor >4 for high inrush demanding loads, overload 120 percent for 10 minutes, 400 percent for 500mS
- VRLA Maintenance Free Lead Calcium Battery's provide the required 90 minute minimum run time in Emergency mode
- Battery recharge time is less than 24 hours, meets all UL 924 and NFPA101 Life Safety Code requirements
- Operating temperature 20° to 30° C
- Brownout protection set for 85% of the nominal line voltage



# LiteMinder Modular Fast Transfer Sine Wave Inverter

## Certification

- UL924 compliant Self-Test/Self-Diagnostics are standard, with interactive LCD display (MMI)
- Listed to UL924, and meets NFPA101 Life Safety Code, NFPA70-NEC and OSHA Requirements, 1.0-2.8KVA models meet CSA C22.2 No. 141-10

## Warranty

- Electronics are warranted for 2 years and the VRLA batteries have a 10 year warranty, optional factory startup increases the warranty to 3 years

## ORDERING GUIDE – Single Phase

Example: LM-12500-1P-LC-IB-OB-S4-TA-FS

Model	VA Rating	Phase Configuration	LC	Input Voltage	Output Voltage	Output Breaker Configuration	Options
LM	1000 VA 1600 VA 2200 VA 2800 VA 3200 VA 4200 VA 5200 VA 6250 VA 8250 VA 10500 VA* 12500 VA*	1P Single Phase 120 or 277 (L-N)	LC	IA 120V (L-N)  IB 277V (L-N)	OA 120V (L-N)  OB 277V (L-N)	<p><b>*C(n)</b> 20A Normally On Output Breaker  <b>*O(n)</b> 20A Normally Off Output Breaker  <b>*S(n)</b> 20A Switched Output Breaker  <b>(n) =</b> Quantity Required  <b>BB</b> Indicates Special Breaker Current Requirement, Contact Factory</p> <p><b>Quantity Limitations</b>                      (Any combination of output types)</p> <p><b>1000VA</b>                      8 x 20A Normally On without TA option                      4 x 20A Normally Off With or Without TA Option                      4 x 20A Switched With or Without TA Option                      5 x 20A Normally On with TA Option</p> <p><b>1600 - 3200VA</b>                      11 x 20A Normally On without TA option                      6 x 20A Normally off With or Without TA Option                      6 x 20A Switched With or Without TA Option                      7 x 20A Normally On with TA Option</p> <p><b>4200 - 6250VA</b>                      12 x 20A Normally On without TA option                      8 x 20A Normally Off With or Without TA Option                      8 x 20A Switched With or Without TA Option                      8 x 20A Normally On with TA Option</p> <p><b>8250 - 12500VA</b>                      24 x 20A Normally On without TA option                      12 x 20A Normally Off With or Without TA Option                      12 x 20A Switched With or Without TA Option                      16 x 20A Normally On with TA Option</p>	<p><b>*TA</b> Trip Alarm for all circuit breakers  <b>TB</b> 1 Summary / 2 programmable terminal block for form C dry contacts  <b>MB</b> Internal Maintenance Bypass Switch (make before break)  <b>BI</b> BACnet Integration Module  <b>DT</b> Delayed Transfer, 60 ms  <b>Z4</b> Seismic Zone 4 certified  <b>RA</b> Remote Annunciator  <b>KE</b> Keyed Lock  <b>BTMS</b> Battery Thermal Management System  <b>WM</b> Wall Mount Kit (1KW only)  <b>FS</b> Startup commissioning on Site  <b>EW</b> Extended Warranty to 5 Years (EW requires FS)  <b>M(n)</b> Maintenance Plan, n = years (Min: 2/Max: 5)  <b>EB15</b> Extended Battery Warranty to 15-years, 1-full year and 14 years pro-rated  <b>EB20</b> Extended Battery Warranty to 20-years, 1-full year and 19 years pro-rated  <b>UP</b> Ship inverter less batteries  <b>EPO</b> Emergency Power Off</p> <p><i>*Maximum Number of Breaker Trip Alarms Model Dependant</i></p>
LM			LC				

Fill in fields from categories above and complete type and part number.

Type Number:

Full Part Number:

Model	No of Cabinets	Width Per Cabinet	Height Per Cabinet	Depth Per Cabinet	Inverter Cabinet Weight	Battery Cabinet Weight	Total Battery Weight	Total Shipping Weight	Max. BTU's/Hr. at Full Load
LM1000	1	24"	38"	13"	152 lbs.	N/A	156 lbs.	368 lbs.	68
LM1600	1	32"	52"	13.75"	180 lbs.	N/A	234 lbs.	474 lbs.	109
LM2200	1	32"	52"	13.75"	180 lbs.	N/A	312 lbs.	552 lbs.	150
LM2800	1	32"	52"	13.75"	180 lbs.	N/A	390 lbs.	630 lbs.	190
LM3200	1	32"	52"	13.75"	180 lbs.	N/A	468 lbs.	708 lbs.	209
LM4200	1	32"	50"	23"	315 lbs.	N/A	624 lbs.	1,059 lbs.	286
LM5200	1	32"	50"	23"	315 lbs.	N/A	780 lbs.	1,215 lbs.	355
LM6250	1	32"	50"	23"	315 lbs.	N/A	936 lbs.	1,371 lbs.	426
LM8250	2	32"	50"	23"	365 lbs.	270 lbs.	1,248 lbs.	2,063 lbs.	563
LM10500	2	32"	50"	23"	365 lbs.	270 lbs.	1,560 lbs.	2,375 lbs.	716
LM12500	2	32"	50"	23"	365 lbs.	270 lbs.	1,872 lbs.	2,687 lbs.	852

