AUTHENTIC LIFE SAFETY PRODUCTS | SINCE 1940

CENTRAL LIGHTING INVERTER SYSTEMS

AC EMERGENCY POWER • SINGLE/THREE PHASE • INTERRUPTIBLE/UNINTERRUPTIBLE

DUAL LITE®

Current

GREATER VALUE
INCREASED SAFETY

In an emergency, life safety is the number one priority. By using central lighting inverters, occupants are more likely to evacuate in a safe and orderly fashion, feel more at ease during a crisis, all the while maintaining the architectural integrity of the building and typically yielding the lowest total cost of ownership during normal operation.

LIFE SAFETY CODE

When interior or exterior lighting extinguishes due to an interruption in the normal power supply, the Life Safety Code (NFPA 101) requires egress pathway illumination, which can be provided by a Dual-Lite inverter system. This requirement includes illuminating both the path of egress from inside the building to the nearest exit point and from outside the building to the “public way”.

According to the Life Safety Code, emergency pathway illumination is required for:

Stairs	Ramps	Escalators
Aisles	Walkways	Exit passages
Corridors	Parking lots	Outdoor pathways

SAFETY • VALUE

When compared to other emergency lighting solutions, Central Lighting Inverters are:

- **Safer** than other emergency lighting solutions because their full lumen output results in higher emergency light levels.
- More **reliable** because they are centrally located for easy maintenance and have the capability to email test results or alarm conditions to maintenance personnel .
- **Value** offered by using existing light sources, which maintains architectural design, easy maintenance, email test results and alarm conditions.

Interruptible and non-interruptible emergency AC power systems in single and three-phase configurations.

LSN LIFE SAFETY NETWORK
MEDIUM SINGLE-PHASE INVERTER

SYNCHRON
SMALL SINGLE-PHASE INVERTER

Trident
THREE-PHASE CENTRAL LIGHTING INVERTERS

LiteGear®
COMPACT SINGLE-PHASE INVERTER

LIGHT POWER™
SINGLE-PHASE CENTRAL LIGHTING MICRO INVERTER

ADVANTAGES

FULL LUMEN OUTPUT

- Emergency lighting is provided by existing luminaires.
- Power designated luminaires to full lumen output during a power outage.
- Bright, evenly illuminated path of egress in emergency situations.

AESTHETICS

- Maintains architectural intent and integrity while satisfying life safety requirements.

EASE OF INSTALLATION

- A single central lighting inverter will provide code required power to the emergency lighting vs. multiple fluorescent battery packs or unit equipment. This reduces the amount of time and labor required for initial installation.

EASE OF MAINTENANCE

- One central location for maintenance throughout the building.

COMPATIBILITY

- Compatible with LED, HID, fluorescent and incandescent loads.
- Uninterruptible and Interruptible inverters available for best fit application needs.

OUTDOOR APPLICATIONS

- Inverters can remain located inside the building so cold or wet conditions that can impact performance, cost or life of the product are eliminated.
- Indoor located inverters can provide back-up to outdoor light fixtures.

AREA OF COVERAGE

- The ability to generate the required level of illumination in large venues, such as stadiums or gymnasiums, is beyond the capability of most emergency lighting unit equipment. A properly sized central lighting inverter powering existing fixtures at full light output is the logical choice for these applications.

AUXILIARY CRITICAL LOADS

Capacity to provide emergency power for:

- Fire detection and protection equipment
- Directional egress systems
- Building management systems
- Automated door mechanisms
- Climate control systems
- Patient care support functions
- Security systems
- Communications equipment

TOTAL COST OF OWNERSHIP

- Reduce your operating and maintenance costs to yield the lowest overall total cost of ownership.
- Intuitive interfaces
- Remote communications technology
- Energy efficient designs
- Central maintenance location

LIGHTPOWER™

SINGLE-PHASE CENTRAL LIGHTING MICRO INVERTER

- Designed for indoor installation in commercial or industrial applications,
- Provide sinusoidal Emergency AC power to lighting fixtures equipped with incandescent, linear fluorescent, compact fluorescent or LED lamps between 20 and 55 watts.
- The lighting load can be installed at a distance of up to 1,000 feet from the LIGHTPOWER™ micro inverter. Observe all required AC conductor sizing requirements.

FEATURES & BENEFITS

AC LOCKOUT
Prevents battery damage by shutting off DC battery power prior to AC power being supplied during installation.

BROWNOUT PROTECTION
Protects loads from low AC line voltage

LOW VOLTAGE DISCONNECT
Protects the batteries from damaging 'deep-discharge' conditions during prolonged power outages.

MULTIPLE MOUNTING OPTIONS
Surface wall mounted, recessed wall mounted, or recessed into a T-Grid ceiling.

LED LAMP COMPATIBILITY
More cost effective than decentralized battery packs at providing emergency power to a luminaire.

TRUE SINE WAVE OUTPUT
Sinusoidal waveforms yield less distortion and assure that sensitive loads will operate normally.

GENERATION I STATUS & CONTROL INTERFACE
Three multipurpose LED indicators provide simple, intuitive interface to notify the user of operating status.

ORDERING GUIDE

LPS –

Model		Capacity		Mounting	
LPS	Micro Inverter	20	20 VA/W[1]	S	Surface Wall
		32	32 VA/W[2]	R	Recessed Wall[1]
		35	35 VA/W[1]	T	Recessed Ceiling T-Grid
		55	55 VA/W[2]		

Notes:
1 Nickel-Cadmium battery type
2 Lead Calcium battery type

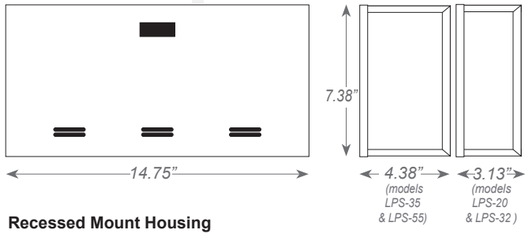
ACCESSORIES
RTSLP Remote Test Switch for LPS

SPECIFICATIONS

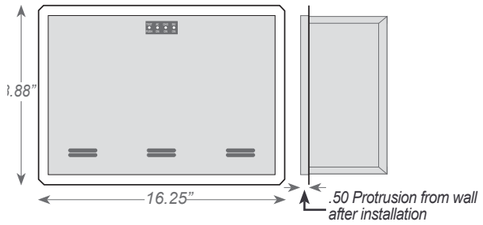
	LPS32	LPS55	LPS20	LPS35
Power Rating (VA/W)	32	55	20	35
Power Factor Range	0.44 lead to 0.44 lag			
Temp Range (°C)	20-30			
Weight (lb) with batteries	14	18	11	12
Maximum Input Current (A)	120 VAC: 0.34 A 277 VAC: 0.15 A	120 VAC: 0.54 A 277 VAC: 0.23 A	120 VAC: 0.25 A 277 VAC: 0.11 A	120 VAC: 0.37 A 277 VAC: 0.16 A
System DC Voltage	12			
Recharge Time (Hr)	96			

DIMENSIONS

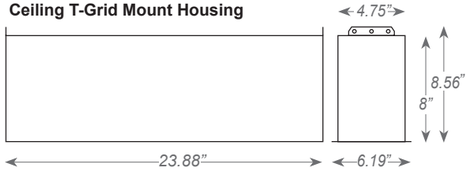
Surface Mount Housing



Recessed Mount Housing



Ceiling T-Grid Mount Housing



Surface Wall Mount Model

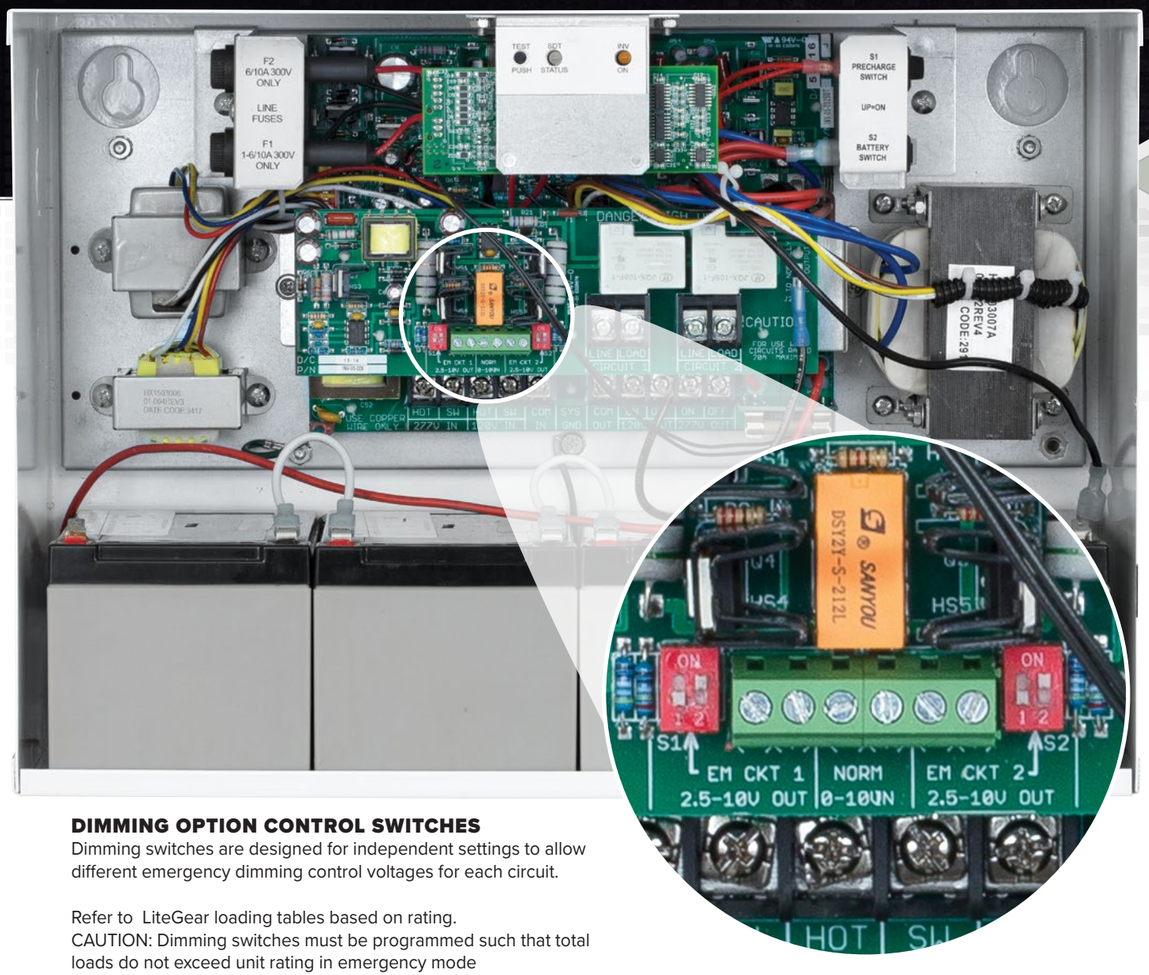
Recessed Wall Mount Model

Recessed Ceiling Mount T-Grid Model

LiteGear®

ADJUSTABLE OUTPUT

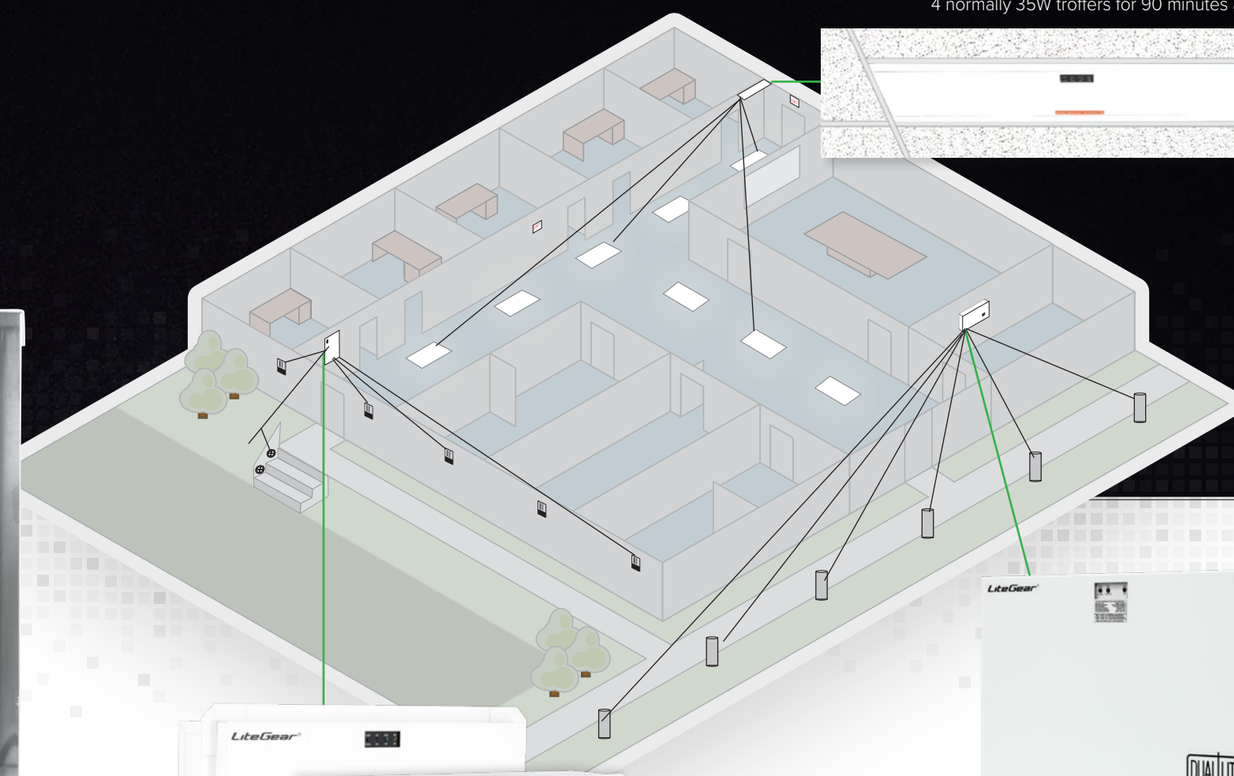
LiteGear adjustable output (-AO) versions, with two or four emergency circuits, work with 0-10V dimmer controls to eliminate the need for additional bypass devices or separate inverters for each switched load. Both circuits are user-programmable to operate the connected fixtures at approximately 25%, 50%, 75% or 100% of nominal output during emergency mode.



DIMMING OPTION CONTROL SWITCHES

Dimming switches are designed for independent settings to allow different emergency dimming control voltages for each circuit.

Refer to LiteGear loading tables based on rating.
CAUTION: Dimming switches must be programmed such that total loads do not exceed unit rating in emergency mode



LG125T Recessed T-Grid Ceiling Unit backing up indoor LED fixtures;

Example
With the AO switch set to 75%, the LG125T will power 4 normally 35W troffers for 90 minutes at 26.25W

LG125S Surface Wall Mount or LG125R backing up outdoor steplights and wall packs

Example
With the AO switch set to 50%, the LG125 will power 6 normally 30W LED lamps for 90 minutes at 15W

LG250SI Surface Wall Mount Unit backing up outdoor bollards;

Example
With the AO switch set to 100%, the LG250 will power 6 normally 31W LED lamps for 90 minutes at 31W

LOADING TABLE

Output of all (4) dimming circuits (Volts)	Maximum Load (Watts)							
	2.5		5.0		7.5		10.0	
Model	Norm Mode	Emerg Mode	Norm Mode	Emerg Mode	Norm Mode	Emerg Mode	Norm Mode	Emerg Mode
LG125-AO	400	110	200	110	133	110	110	110
LG250-AO	800	220	400	220	267	220	220	220
LG375-AO	1350	375	675	375	450	375	375	375
LG600-AO	2160	600	1080	600	720	600	600	600
LG750-AO	2700	750	1350	750	900	750	750	750
LG950-AO	3420	950	1710	950	1140	950	950	950
LG1150-AO	4140	1150	2070	1150	1380	1150	1150	1150

LiteGear®

COMPACT SINGLE-PHASE INVERTERS 125VA OR 250VA

- Available with 125VA or 250VA capacities
- Provides emergency AC power to existing indoor and outdoor lighting fixtures.
- Compatible with incandescent, compact fluorescent, linear fluorescent and LED lamped fixtures.

Interior or exterior egress lighting on multiple circuits with each circuit powered by a separate LiteGear®.

FEATURES & BENEFITS

AC LOCKOUT
Prevents battery damage by shutting off DC battery power prior to AC power being supplied during installation.

BROWNOUT PROTECTION
Protects loads from low AC line voltage

LOW VOLTAGE DISCONNECT
Protects the batteries from damaging 'deep-discharge' conditions during prolonged power outages.

MULTIPLE MOUNTING OPTIONS
Surface wall mounted while the LG125 may be surface wall, recessed wall, or recessed into a T-Grid ceiling.

LED LAMP COMPATIBILITY
More cost effective than decentralized battery packs at providing emergency power to a luminaire.

TRUE SINE WAVE OUTPUT
Sinusoidal waveforms yield less distortion and assure that sensitive loads will operate normally.

GENERATION I STATUS & CONTROL INTERFACE
Three multipurpose LED indicators provide simple, intuitive interface to notify the user of operating status.

ADJUSTABLE OUTPUT OPTION
0-10V dimming compatibility distributes output across larger loads and eliminates need for external bypass devices.

SPECIFICATIONS

	LG125S	LG125R	LG125T	LG250S	LG250SI
Power Rating (VA - W)	125/110			250/220	
Power Factor Range	0.88 lead to 0.88 lag				
Form and Fit	Wall Mount Surface	Wall Mount Recessed	Ceiling Mount Recessed T-grid	Wall Mount Surface	
Weight (lb) with batteries	42	42	43	60	
Maximum Input Current (A)	120 VAC: 1.2 A 277 VAC: 0.52 A	120 VAC: 1.2 A 277 VAC: 0.52 A	120 VAC: 1.2 A 277 VAC: 0.52 A	120 VAC: 2.4 A 277 VAC: 1.1 A	
System DC Voltage	24			48	
Recharge Time (Hr)	96			96	

ORDERING GUIDE

LG – – –

Model		Capacity	
LG	Litegear® Central Ligthing Inverter	125	125VA/110W
		250	250VA/220W[3]

Mounting		Self-Diagnostics	
S	Surface Wall	Blank	None
R	Recessed Wall[1]	I	Self Testing/ Diagnostics[2,4]
T	Recessed Ceiling T-Grid[1]		

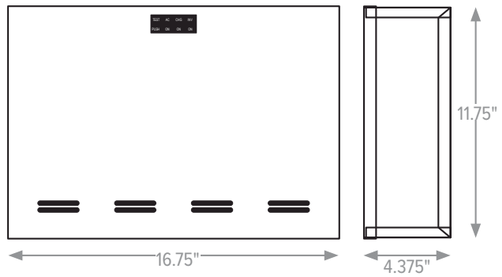
Options	
Blank	None
AO	Adjustable Output (4 - levels)

Accessories (Order Separately)	
RTSLP	Remote Test Switch

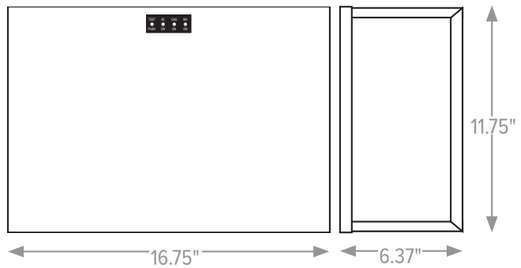
Notes:
1. Only available on 125VA/110W version
2. Only available on 250VA/220W version
3. Housing (93098085) and batteries (93068259) ship in separate cartons
4. Housing (93098087) and batteries (93068259) ship in separate cartons

DIMENSIONS

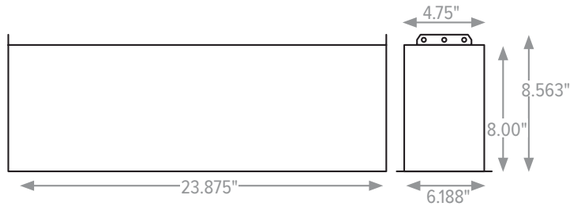
LG125S Wall Mount Surface Model



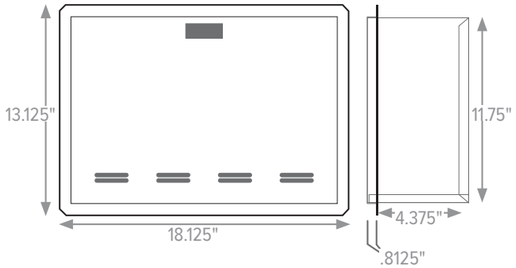
LG250S and LG250SI Wall Mount Surface Models



LG125T Recessed Ceiling T-Grid Mount Model



LG125R Recessed Wall Mount Model



LiteGear®

COMPACT SINGLE-PHASE INVERTER 375/600 MODELS

- Available with 375VA or 600VA capacities
- Provides emergency AC power to existing indoor and outdoor lighting fixtures.
- Compatible with incandescent, compact fluorescent, linear fluorescent and LED lamped fixtures.

FEATURES & BENEFITS

AC LOCKOUT
Prevents battery damage by shutting off DC battery power prior to AC power being supplied during installation.

BROWNOUT PROTECTION
Protects loads from low AC line voltage

LOW VOLTAGE DISCONNECT
Protects the batteries from damaging 'deep-discharge' conditions during prolonged power outages.

LED LAMP COMPATIBILITY
More cost effective than decentralized battery packs at providing emergency power to a luminaire.

TRUE SINE WAVE OUTPUT
Sinusoidal waveforms yield less distortion and assure that sensitive loads will operate normally.

GENERATION I STATUS & CONTROL INTERFACE
Three multipurpose LED indicators provide simple, intuitive interface to notify the user of operating status.

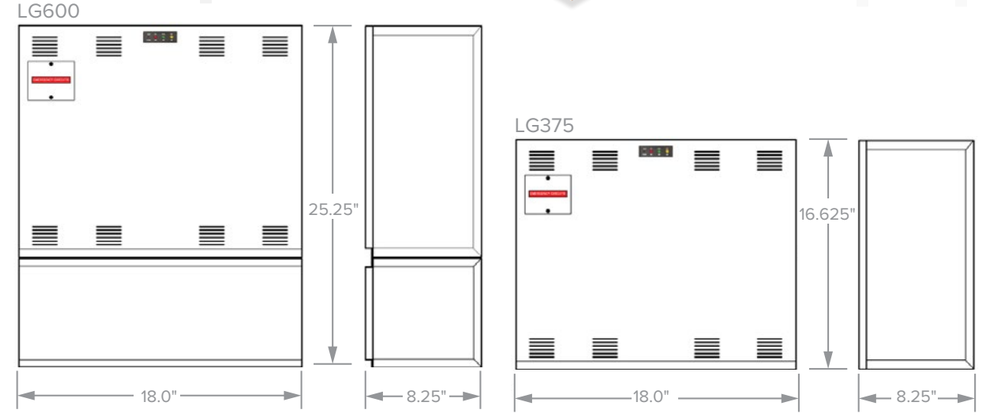
ADJUSTABLE OUTPUT OPTION
0-10V dimming compatibility distributes output across larger loads and eliminates need for external bypass devices.

OUTPUT CIRCUIT BREAKER OPTION
Two (2) 10A circuit breakers protect output loads

SPECIFICATIONS

	LG375S	LG375SI	LG600S	LG600SI
Power Rating (VA - W)	375/375		600/600	
Power Factor Range	0.88 lead to 0.88 lag			
Weight (lb) with batteries	113		172	
Maximum Input Current (A)	120 VAC : 3.4 A 277 VAC : 1.5 A		120 VAC : 5.5 A 277 VAC : 2.4 A	
System DC Voltage	60		96	
Recharge Time (Hr)	96		96	

DIMENSIONS



ORDERING GUIDE

LG –

Model	Capacity	Mounting	Self-Diagnostics	Options	Accessories (Order Separately)
LG Litegear® Central Ligthing Inverter	**375** 375VA/W **600** 600VA/W	**S** Surface Wall	**Blank** None **I** Self Testing/Diagnostics	**Blank** None **AO** Adjustable Output (4 - levels) with 4 output circuits **CB** Two (2) 10A Output Circuit Breakers	**RTSLP** Remote Test Switch

LiteGear®

COMPACT SINGLE-PHASE INVERTER 750-950-1150 MODELS

- Available with 750VA, 950VA or 1150VA capacities
- Provides emergency AC power to existing indoor and outdoor lighting fixtures.
- Compatible with incandescent, compact fluorescent, linear fluorescent and LED lamped fixtures.

FEATURES & BENEFITS

AC LOCKOUT
Prevents battery damage by shutting off DC battery power prior to AC power being supplied during installation.

BROWNOUT PROTECTION
Protects loads from low AC line voltage

LOW VOLTAGE DISCONNECT
Protects the batteries from damaging 'deep-discharge' conditions during prolonged power outages.

LED LAMP COMPATIBILITY
More cost effective than decentralized battery packs at providing emergency power to a luminaire.

TRUE SINE WAVE OUTPUT
Sinusoidal waveforms yield less distortion and assure that sensitive loads will operate normally.

GENERATION I STATUS & CONTROL INTERFACE
Three multipurpose LED indicators provide simple, intuitive interface to notify the user of operating status.

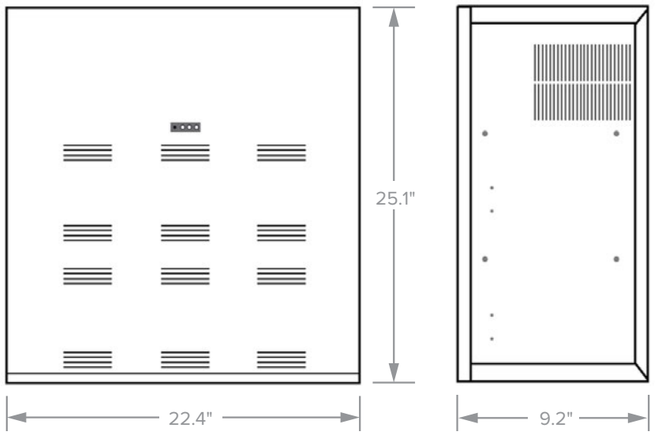
ADJUSTABLE OUTPUT OPTION
0-10V dimming compatibility distributes output across larger loads and eliminates need for external bypass devices.

OUTPUT CIRCUIT BREAKER OPTION
Two (2) 10A circuit breakers protect output loads

SPECIFICATIONS

	LG750S	LG750SI	LG950S	LG950SI	LG1150S	LG1150SI
Power Rating (VA - W)	750/750		950/950		1150/1150	
Power Factor Range	0.88 lead to 0.88 lag					
Weight (lb) with batteries	190		222		254	
Maximum Input Current (A)	120 VAC : 7.53 A 277 VAC : 3.26 A		120 VAC : 8.45 A 277 VAC : 3.66 A		120 VAC : 10.2 A 277 VAC : 4.42 A	
System DC Voltage	48		60		72	
Recharge Time (Hr)	96					

DIMENSIONS



ORDERING GUIDE

LG –

Model	Capacity	Mounting	Self-Diagnostics	Options
LG Litegear® Central Lighting Inverter	**750** 750VA/W **950** 950VA/W **1150** 1150VA/W	**S** Surface Wall	**Blank** None **I** Self Testing/Diagnostics	**Blank** None **AO** Adjustable Output (4 - levels) with 4 output circuits **CB** Six (6) 10A Output Circuit Breakers [1,2]

Accessories (Order Separately)

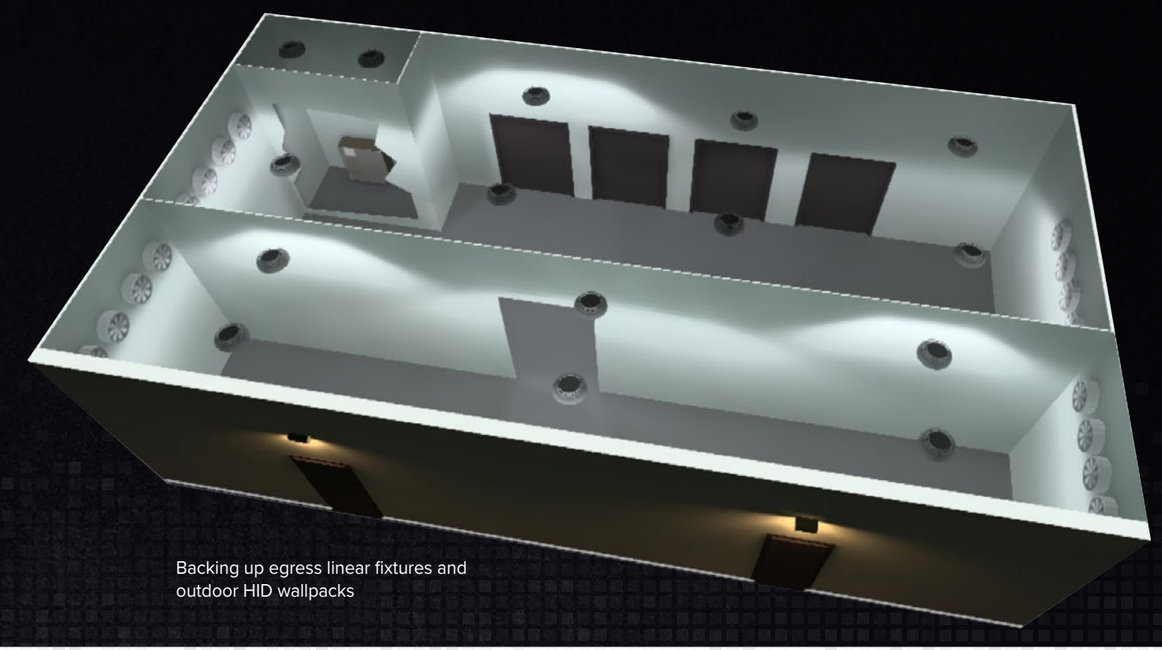
RTSLP Remote Test Switch

Notes:
1 Maximum loading of each circuit must be 1,035 watts or less.
2 15A branch circuit max.

SYNCHRON

SINGLE-PHASE INVERTER

- Provides true sine wave emergency power in ratings from 750 to 2100VA/W.
- Features true 'no-break' switching between utility and inverter power.
- Mounts indoors
- Powers indoor or outdoor fixtures and other critical loads.



Backing up egress linear fixtures and outdoor HID wallpacks

FEATURES & BENEFITS

OFFLINE TECHNOLOGY

Continuously monitors input power conditions allowing the unit to operate with 98% efficiency which lowers operating costs.

HID COMPATIBILITY

An instantaneous and synchronized transfer of power from normal to emergency mode ensures compatibility with HID lamp sources.

TRUE SINE WAVE OUTPUT

Sinusoidal waveforms yield less distortion and assure that sensitive loads will operate normally.

PULSE WIDTH MODULATION

High frequency, digitally generated output waveform results in greater efficiency, less heat, quieter operation and lower operating costs.

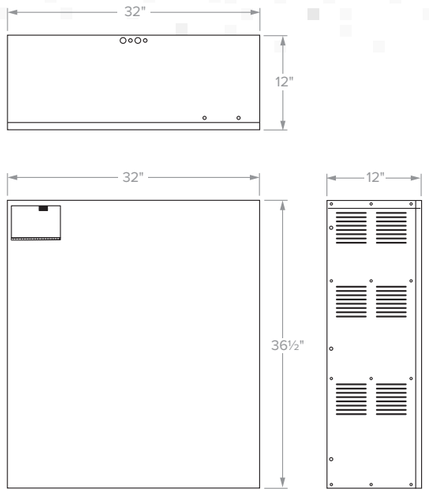
SMALL FOOTPRINT

The Synchron inverter system has one of the smallest footprints in the industry – less than 3 square feet!

GENERATION II STATUS & CONTROL INTERFACE

Three multipurpose LED indicators provide a simple, intuitive interface to notify the user of operating status malfunctions.

DIMENSIONS



SPECIFICATIONS

VA/Watts	750	1000	1500	2100
Power Factor Range	.8 lead to .75 lag			
Input/Output Voltage	120/120 or 277/277VAC ±10%			
AC Input Circuit Breaker Rating 120/277V	10/5A	13/6A	20/8A	25/10A
Charger Size	2 Amps			
System DC Voltage	72	72	72	96
Cabinet Size	22"W x 23"H x 10"D (55.9cmW x 58.4cmH x 25.4cmD)		32"W x 36.5"H x 12"D (81.3cmW x 92.7cmH x 30.5cmD)	
BTU/Hour - Line/Inverter	131/382	175/510	263/765	368/886
Weight [lbs. (kg) - including batteries]	281 (128)	346 (157.6)	400 (182.2)	480 (218.7)

ORDERING GUIDE

DLS	–							
Model	Capacity Rating	Input/ Output Voltage (VAC)	Output Circuit Breaker Type	Output Circuit Breaker Voltage Rating	Output Circuit Breaker Ampere Rating	Output Circuit Breaker Quantity[1,5,6]	Output Circuit Breaker Supervision[1]
DLS Single Phase Central Lighting Inverter	**750** **1000** **1500** **2100**	**120** **277**	**Blank** Normally On **N** Normally Off [2,3,4]	**A** 120VAC **B** 277VAC	**15** **20** **25** **30**	**01 to 10**	**Blank** Monitored **U** Unmonitored

Notes:

1. A maximum of 6 monitored or 10 unmonitored normally-on circuit breakers may be specified
2. A maximum of 4 normally-off circuit breakers may be specified
3. Maximum rating of normally-off circuit breakers is 20 amperes
4. Normally-off output circuit breakers include a built-in, 15 minute retransfer delay to accommodate HID lighting loads
5. Total quantity of monitored normally-off and normally-on breakers cannot exceed 6
6. Total quantity of unmonitored normally-off and normally-on breakers cannot exceed 10

LSN LIFE SAFETY NETWORK

MEDIUM SINGLE-PHASE INVERTER

- Includes self-test/self-diagnostic circuitry that complies with Life Safety Code requirements
- A two-line 40 character digital display and a user interface providing control of over 250 operating parameters.
- Available in capacity ratings of 1.0 through 17.5 KVA/KW.

FEATURES & BENEFITS

COMMUNICATIONS
Equipped with an RS232 communication interface. Optional email capability sends pre-defined users alarm and test reports.

ADVANCED BROWNOUT PROTECTION
Protects your loads from brownouts and recurrent low-voltage transients by sensing any drop in voltage and boosting the voltage back up to nominal without drawing current from the batteries and shortening their lives.

SMALL FOOTPRINT
Has one of the smallest footprints in the industry – less than 4 square feet for systems less than 5.0KVA!

SECURITY
Comes standard with locked cabinetry and password protection.

SELF-TESTING/SELF-DIAGNOSTICS

Electronics perform continuous testing of subsystems and lighting loads.

AUTOMATIC & PROGRAMMABLE RECORDING

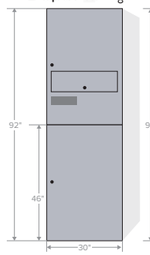
User-programmable discharge tests are performed and logged into memory for automatic NFPA 101 compliance.

GENERATION III STATUS & CONTROL INTERFACE
A 2-line x 40 character microprocessor-controlled display allows the user to monitor and control the inverter through a menu driven interface.

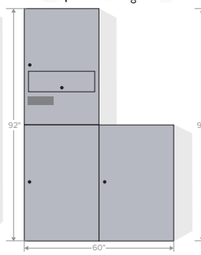
SEISMIC QUALIFIED OPTION
Suits installation specifications calling for continued operation during and after seismic event.

CABINET CONFIGURATIONS

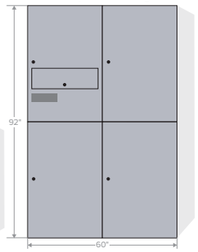
Configuration "A"
Depth 18 5/8"



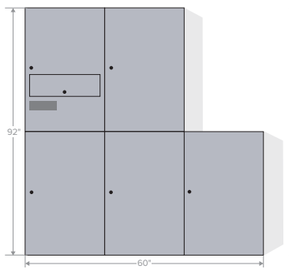
Configuration "B"
Depth 18 5/8"



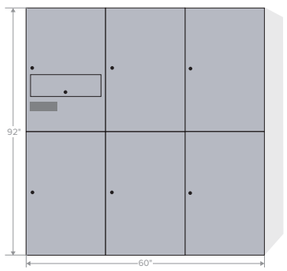
Configuration "C"
Depth 18 5/8"



Configuration "D"
Depth 18 5/8"



Configuration "E"
Depth 18 5/8"



ORDERING GUIDE

Model		Input Voltage[2]		Capacity		Battery Type		Output Voltage (VAC)[2,3,4]	Output Circuit Breaker Type		Output Circuit Breaker Voltage Rating		Output Circuit Breaker Ampere Rating[6]	Output Circuit Breaker Quantity[7]	Output Circuit Breaker Supervision	
D	LSN Central Lighting Inverter	120	120VAC	01	1.0KVA	S	10-year VRLA Lead-Calcium	120	Blank	Normally On	A	120VAC	15	01 - 20	Blank	Monitored
		208	208VAC	02	2.0KVA	G	20-year VRLA Lead-Calcium	120/208	N	Normally Off	B	240VAC	30		U	Unmonitored
		240	240VAC	27	2.7KVA			120/240[5]			C	277VAC	50			
		277	277VAC	37	3.7KVA			120/277			D	208VAC	20			
		347	347VAC	48	4.8KVA			277					35			
				55	5.5KVA			347					60			
				66	6.6KVA								25			
				83	8.3KVA								40			
				10	10.0KVA								80			
				12	12.5KVA											
				15	15.0KVA[1]											
				17	17.5KVA[1]											

Options And Accessories	
EML	Email Device
RSP	Remote Status Panel
SMT	System Monitoring Terminal Including Emergency Power Off Terminal
AR	Alternate Runtime[8]
SBC	Short Battery Cabinet[9]
IBS	Internal Maintenance Bypass Switch (Make Before Break)
C10	10 Amp Charger Upgrade[10]
C20	20 Amp Charger Upgrade[11]
S	Seismic Qualified[12]
Accessories	
DSFK_	Seismic Kit
Service Options	
FSL	Factory Start-Up[13]

Notes:

1. Requires a provided external transformer for 208VAC or 240VAC input.
2. Refer to Specifications table for available Input/Output voltage combinations.
3. Other voltages available. Consult factory.
4. External transformer may be provided.
5. Loading may not exceed 50% of the system's total rating on any 120VAC leg.
6. Normally Off circuit breakers: a maximum rating of 20 amps
7. Normally On circuit breakers: a maximum of 14 monitored, single pole positions or 20 unmonitored, single pole positions may be specified. Normally Off circuit breakers: a maximum of 8 single pole positions (monitored or unmonitored) may be specified.
8. Specify runtime in minutes when ordering. Example: AR120.
9. Available with 1.0, 2.0, 2.7, 3.7, 5.5, and 6.6KVA Series with S batteries only.
10. Available on 1.0 KVA - 4.8KVA Series.
11. Available on 5.5 KVA - 17.5KVA Series. Not available with 120V input on 6.6KVA and above. Not available with 208V input on 12.5 KVA and above. Not available with 240V input on 15.0 KVA and above.
12. Type S Battery in standard height cabinet only; See system configuration for 90-minute run time.
13. Start-Up is non-cancellable / non-returnable and must be performed by an Authorized Service Center within 6 months of battery shipment to increase the inverter warranty to 2 years. Order a quantity of 1 per system. Systems powered up by others are done so at their own risk.

Trident

LARGE THREE-PHASE INVERTERS

- Available output capacity ratings from 10KVA to 125KVA
- Provides clean, regulated computer grade power in both normal and emergency operating mode.
- Offers the smallest three-phase system footprint currently available.
- Mounts indoors
- Powers indoor or outdoor luminaires and other critical loads.

Powering all interior and exterior egress lighting and EXIT signs on all three phases for the entire building.

FEATURES & BENEFITS

DOUBLE CONVERSION TECHNOLOGY

Provides an electronic firewall that allows consistent and steady delivery of clean, filtered power to your critical loads.

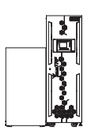
ADVANCED REMOTE COMMUNICATIONS

Available with a variety of remote monitoring and communications capabilities to report audible and visual signaling of status and alarm conditions using multiple protocols through Ethernet and/or web management tools.

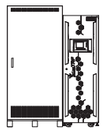
GENERATION IV STATUS & CONTROL INTERFACE

Features a large, user-friendly, LCD graphic display for easy monitoring of operating parameters.

CABINET CONFIGURATIONS

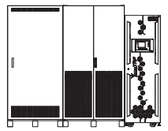


Configuration A

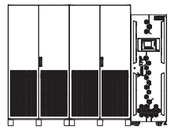


Configuration B

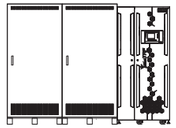
Configuration C



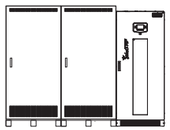
Configuration D



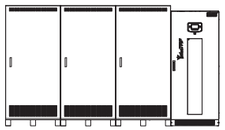
Configuration E



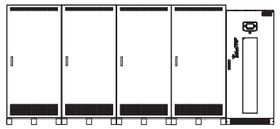
Configuration F



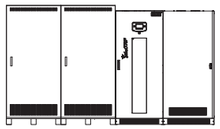
Configuration G



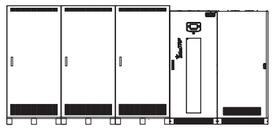
Configuration H



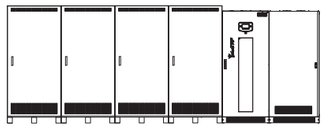
Configuration I



Configuration J



Configuration K



Configuration L

ORDERING GUIDE

TRF –

Model		Input Voltage		Input Conductor		Capacity		Output Voltage (VAC)		Options[6,7,8,9]	
TRF	Trident TRF 3-phase inverter	**208**	208VAC[1]	**3**	3 Wire	**10**	10KVA/9KW	**208**	208VAC	**A**	SNMP/Web Card
		480	480VAC	**4**	4 Wire[2]	**15**	15KVA/13KW	**480**	480VAC[3]	**B**	SNMP/Web Card & Env. Sensor
						20	20KVA/18KW			**C**	Top Entry Cabinet
						30	30KVA/27KW			**D**	SNMP Card & Top Entry Cabinet
						40	40KVA/36KW			**E**	SNMP Card, Env. Sensor & Top Entry Cabinet
						50	50KVA/45KW			**F**	IFC Compliance
						60	60KVA/54KW			**H**	Single Pole Power Distribution
						65	65KVA/58KW			**J**	2-pole Power Distribution
						80	80KVA/72KW			**K**	3-pole Power Distribution
						100	100KVA/90KW				
						125	125KVA/112KW				

Factory Start-Ups (Required)[4]	
FST-1	Factory Start-Up 10-30kVA
FST-2	Factory Start-Up 40-80kVA
FST-3	Factory Start-Up >80kVA

Accessories	
TRF-RSP-1	Remote Status Panel 10-60kVA
TRF-RSP-2	Remote Status Panel 65-125kVA
TRF-SFK-1	Seismic Mounting 10-40kVA
TRF-SFK-2	Seismic Mounting 50-60kVA

Notes:

1. Only available with 208VAC output voltage
2. Available with 480VAC output voltage (all capacities), and with 208VAC input voltage on 10kVA through 65kVA capacities
3. Only available with 480VAC input voltage
4. Start-up must be performed by an Authorized Service Center within 6 months of shipment to maintain battery warranty
5. Batteries must be connect to an energized charging circuit within 90 days from date of shipment or warranty is void
6. Alternate run times and 50Hz models available on request; consult factory
7. SNMP/Web Card: Internal SNMP Card allows inverter management across a LAN using any of the main network communication protocols - TCP/IP, HTTP and network interface (SNMP)
   SNMP/Web Card & Env. Sensor: SNMP card with environmental sensor module that senses temperature, humidity and smoke and displays it via SNMP.
   Top Entry Cabinet: Provides additional side-mounted compartment to allow for top conduit entry. This option adds 4.75 inches to the width and 6 inches to the depth of the 10-40kVA unit. It adds 15.75 inches to the width of the 65-125kVA unit
8. Power distribution available on 10-40kVA sizes; includes nine (9) unmonitored, 20A output breakers
9. Power distribution options include Top Entry Cabinet

FEATURES & OPTIONS COMPARISON

FEATURES	LightPower	LiteGear®	Synchron	LSN	Trident
Power Capacity	20 - 55 VA	125 - 1150 VA	750 - 2100 VA	1.0 - 17.5 KVA	10 - 125 KVA
Input Voltage Output Voltage	120,277 VAC	120,277 VAC	120,277 VAC	120-347 VAC	120, 208, 277, 480 VAC
Phasing	Single	Single	Single	Single	Three
AC Lockout	•	•	•	•	•
Brownout Protection	•	•	•	•	•
Low Voltage Disconnect	•	•	•	•	•
LED Lamp Compatibility	•	•	•	•	•
HID Compatibility			•	•	•
Offline Technology	•	•	•	•	
Small Footprint	•	•	•	•	•
True Sine Wave Output	•	•	•	•	•
Pulse Width Modulation	•	•	•	•	•
Advanced Brownout Protection				•	•
Security				•	•
Self-Testing/Self Diagnostics		Optional on 250/375/600/750/950/1150		•	•
Automatic & Programmable Test Recording				•	•
Local Switch Bypass	•	•			
Double Conversion Technology					•
NEMA 3R Cabinet					On Request
STATUS & CONTROL INTERFACE					
LED Indicator	3	3	3	5	6+
Test Button	Gen I	Gen I	Gen II	Gen III	Gen IV
LCD Display				Gen III	Gen IV
Keypad				Gen III	Gen IV
Dynamic Line Diagram					Gen IV
Menu Driven Interface					Gen IV
OPTIONS					
MULTIPLE MOUNTING OPTIONS					
Recessed Ceiling	•	LG125			
Recessed Wall	•	LG125			
Wall	•	•			
Floor			•	•	•
Seismic				•	•
COMMUNICATIONS/CONTROL					
Dimmer Bypass		•			
RS232 Interface				•	•
RS485 Interface					•
Email Interface				•	•
Web Management Interface					•
SERVICE & SUPPORT					
Factory Startup			•	•	•
Additional Training Visit			•	•	•
Preventative Maintenance Program			•	•	•

INVERTER SELECTION GUIDELINES

Sizing an inverter should be based on using peak current requirements rather than a sum of lamp wattages. To size an inverter properly for a 90 minute run time, simply do the following three steps:

- Determine the VA of each fixture or product (fixture voltage x fixture peak current)
- Sum up the VA of each product or fixture
- Select the next larger inverter as long as it incorporates a safety factor (typically x 1.25) for slight voltage drops, excess inrush current and for future expansion

Utilizing the chart to the left, check that the inverter capacity needed allows for the features required.

EXAMPLE: A warehouse uses HID luminaires for its lighting of which (12) luminaires need emergency power. Each fixture needing emergency power utilizes a 250 MH lamp and draws 1.1 Amps on a single phase line voltage of 277VAC.

PROPER CALCULATION METHOD:

277 VAC x 1.1 Amps x 12 fixtures x 1.25 Safety Factor = 4,571VA or 4.571 KVA total load requirement. In this case, one would select a 4.8KVA or larger LSN inverter.

IMPROPER CALCULATION METHOD:

12 fixtures = 3,000 VA or 3.0 KVA total load requirement. In this case, one would have selected 3.7 KVA LSN inverter. Once installed, this system would probably have experienced system overload resulting in additional costs from replacing blown fuses and additional service calls.

Suffice it to say, the most critical point of information is the peak current requirement (sometimes known as “Starting Current” or “Inrush Current”) of each fixture. It can usually be retrieved from the ballast, driver or fixture specification sheet; sometimes, it must be obtained from the ballast/driver manufacturer. Now you know how to properly select a central lighting inverter system.

SERVICE & SUPPORT

FACTORY STARTUP

All single-phase inverter systems (except LiteGear® and LightPower™ models) offer factory start ups as a service option. There is a 2 year warranty when factory start up is purchased. Three-phase Trident inverters require a factory start-up be purchased. A factory trained technician will perform all steps necessary to ensure proper operation of the central lighting inverter following installation by a qualified electrical contractor.

ADDITIONAL TRAINING VISIT

After completing the on-site system start-up, the technician will be available at that time to train owner/user personnel. If the appropriate personnel are not available for on-site training at the completion of the factory start-up procedure, an Additional Training Visit (ATV) option is available at extra cost.

PREVENTIVE MAINTENANCE PROGRAM

All single-phase (except LiteGear® and LightPower™ models) and three-phase inverter systems qualify for Dual-Lite’s preventive maintenance program. This program provides nine different plan levels including extended warranty programs. Each plan offers a choice of preventive maintenance levels that provide annual visits by a factory trained technician plus ‘call for service’ options.

Current

Current Lighting Solutions, LLC
701 Millennium Blvd.
Greenville, SC 29607

currentlighting.com/dual-lite

Rev 05/24/22
DL_CLI_BROCHURE_R01