# **EEG** Catalyst Energy Group







### Reliable Pure Sine Wave Power Generation & Storage

CEG systems provide more hours of stored, pure sine wave energy because they feature a number of proprietary, seemlessly integrated components:

ENHANCED BATTERIES, PROPRIETARY CHARGE CONTROLLER - CEG's proprietary batteries, manufactured by a large, international battery company, contain a custom dielectric frame between positive and negative ions. The frame's impact on the ions enables faster charging and more storage hours. CEG's charge controller optimizes battery efficiency via a unique algorithm that monitors and controls the entire system and receives automatic software upgrades via Wi-Fi.

INTEGRATED PROPRIETARY POWER FACTOR UNITS - CEG Hybrid Power Generators incorporate proprietary Power Factor Capacitors which supply power to meet demand surges, thereby enhancing efficiency and prolonging battery amp hours.

CUSTOM INVERTERS - CEG's custom, high quality inverters contain fail-safe redundant printed circuit boards. This addresses the weak link in any energy storage system as inverters produce heat which can cause electronics to fail. Further enhancements to CEG inverters include over-sized wiring and copper clad connectors.





















### Company Overview

The inevitable ascension of renewable energy has now occurred, fostered not only by the emergence innovative, economically attractive technologies but by the ability to connect those technologies to the appropriate customers. Incentive driven enterprises will be replaced by companies featuring both technologies and products that are financially and environmentally attractive and are supported by marketing and sales platforms that will let them access their appropriate markets. Those are the companies that will complete the transformation of renewable energy from a subsidized peripheral source of power into a mainstream supplier of overall energy needs.

Catalyst Energy Group (CEG) is precisely that combination. Possessing a large multi-national manufacturing capability, a cutting edge design and engineering laboratory and a sales and marketing team with international reach, CEG offers an innovative, uniquely effective and adaptable array of energy generation and storage products that feature unmatched performance in extraordinarily durable configurations. CEG's decades of manufacturing and engineering capabilities provide the capacity to accommodate the needs of large multi-national customers while its creative design laboratory relentlessly integrates refinements and innovation into each of its products.

The effectiveness of energy generation and storage systems is determined by some simple math. How efficiently does the product accumulate and store power and for how may KW or MW hours can it provide that power? In terms of KW hours, many of the smaller, and sometimes mobile "solar" units available, are actually conventional fossil fuel generators disguised as renewable products and too often the larger Megawatt units are one size fits all ponderous devices that output very few hours of stored energy. CEG products are different. In every configuration, they provide the vast majority of their power from the renewable source and in the larger sizes can be customized to specifically address the needs of the customer.

CEG systems range in size from 3 kW to 1 mW and are available in both mobile and stationary configurations with proprietary firmware capable of optimizing functionality to meet each customer's operating conditions. These systems don't function simply as a conduit, accumulating power and then transferring that power, but as a legitimate storage facility as gathered energy is always sent to batteries initially and then distributed at the times and at the volumes required by the customer. All products are engineered as plug and play, are designed to accommodate new technologies as they become viable and can be daisy chained to meet demand of any size.

## Introduction



**ML** Series



**MLi Series** 

### **SOLAR MOBILE LIGHTING**

Light output for continious night work in a wide range of applications including Mining, Road work, Construction, Hazard Illumination, Remote Area Lighting, Agriculture and Special Events.

Plug & Play architecture. Environmentally friendly, silent, odorless and smoke free.

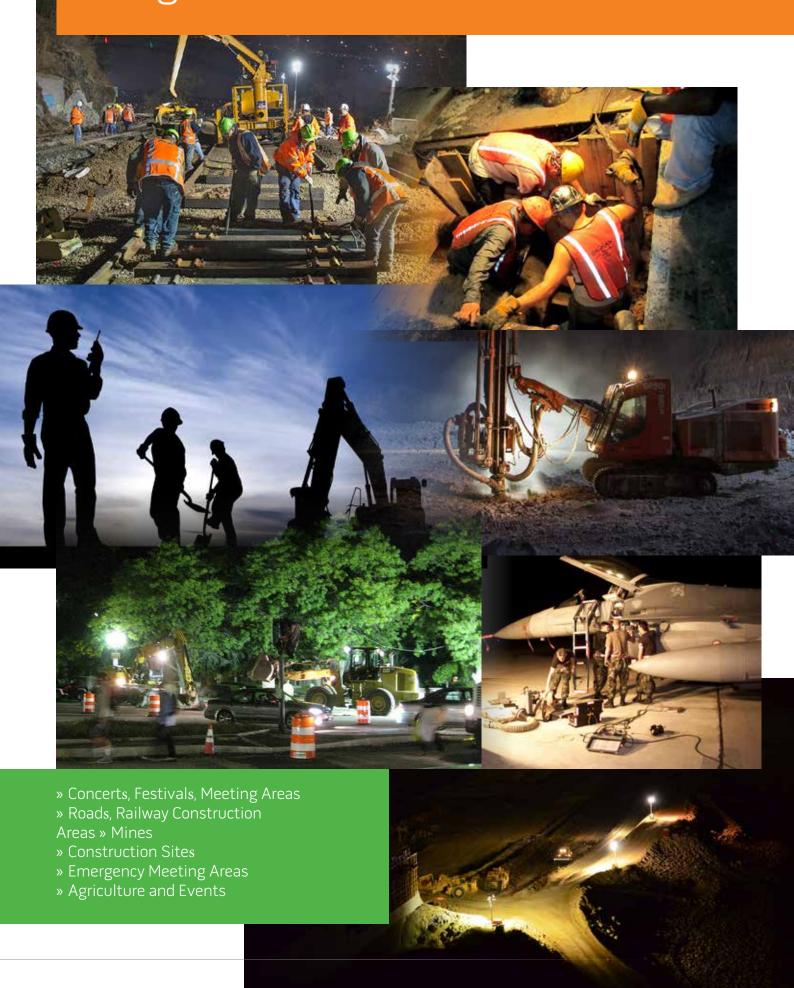
Electricity generated in CEG Solar Mobile Light Towers is stored in self-maintaining deep cycle stationary batteries.

All models offer an optional inverter to use the light tower as a generator! All inverter models have an AC port to easily connect to the grid or a generator to charge the battery.

All models are delivered fully assembled, after rigorous testing to meet demand 24 hours a day.



## Usage Areas







# ML Series Data Sheet



		ML-400	ML-400XL	ML-600	ML-600XL
LED	Power Watt	4 x 100W	4 x 100W	4 x 150W	4 x 150W
	LED Efficiency	130-160 lm/W	130-160 lm/W	130-160 lm/W	130-160 lm/W
	Working Life	50,000 hrs	50,000 hrs	50,000 hrs	50,000 hrs
	Protection Grade	IP66	IP66	IP66	IP66
	Working Temperature	-30C to +60C	-30C to +60C	-30C to +60C	-30C to +60C
	Warranty	2 Years	2 Years	2 Years	2 Years
SOLAR	kWh per day	5200	6400	5200	6400
	Numbers of Penels	4	4	4	4
	Module watts Each	260	320 or 330	260	260
	Total Array Watts	1040	1280	1040	1280
	Warranty	25 years	25 years	25 years	25 years
BATTERY	Bank in Amp-Hours	600 A	600 A	600 A	600 A
	Bank Voltage	24 VDC	24 VDC	24 VDC	24 VDC
	Est bank storage	14.4 kWh	14.4 kWh	14.4 kWh	14.4 kWh
	Туре	Gel	Gel	Gel	Gel
	Deep Cycle	1500	1500	1500	1500
	Warranty	2 years	2 years	2 years	2 years
CHARGE CONTROLLER	Max Amps -Hours	60	60	60	60
	MPPT	Yes	Yes	Yes	Yes
	Display	Yes	Yes	Yes	Yes
	Warranty	2 years	2 years	2 years	2 years
DATA	PV Input Voltage	Yes	Yes	Yes	Yes
	PV Input Currency	Yes	Yes	Yes	Yes
	Battry Voltage	Yes	Yes	Yes	Yes
	Output Current	Yes	Yes	Yes	Yes
	Inst. kW	Yes	Yes	Yes	Yes
	Date Loggings	120 days	120 days	120 days	120 days
TRAILER	Mast plus Fixtures	7.5 m	7.5 m	7.5 m	7.5 m
	Axle	Single Axle	Single Axle	Single Axle	Single Axle
	Warranty	2 Years	2 Years	2 Years	2 Years





### ML-İ Series

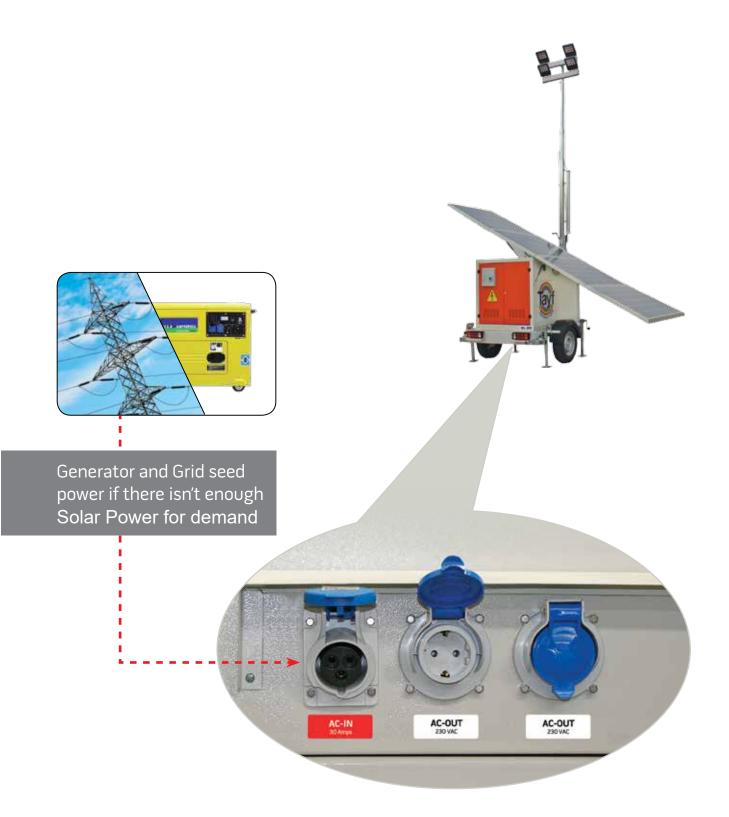
#### Data Sheet











AC inlet - simple Grid/Utility connection



# **EEG** Catalyst Energy Group



Catalyst Energy Group One Lincoln Centre, 5400 LBJ Freeway Dallas, Texas 75240

(214) 210-0085

info@CatalystEnergyGroup.com CatalystEnergyGroup.com