



# EnviroLight Series Solar Billboard Lighting



**Silicon Solar Inc**  
Innovative Solar Solutions™

Innovating Today's Solar Technology  
for the Future of Tomorrow



PARK OUTDOOR

18th Street - 1000  
18th Street - 1000  
18th Street - 1000

18th Street - 1000



# EnviroLight Series Solar Billboard Lights

## The EnviroLight Advantage

### Why Choose Solar Billboard Lighting?

The cost of electricity around the United States has increased over the last few years more dramatically than ever before in history, and the current industry trends do not show any slowdown, or reversal, in these price growth trends. Additionally, the cost of doing business is on the rise while consumer spending is becoming tighter, and more hard fought, leading to lower profit margins, and tighter budgets. As an outdoor advertising company, the cost of lighting your billboards can be extremely high, and eat away large amounts of company profits. Solar Billboard Lighting, on the other hand, requires no electricity (in the normal sense) and therefore, through electric cost savings over the lifetime of the Solar Billboard Lighting System, they completely pay for themselves more than once over. And, in a world that is increasingly concerned with cleaner, greener, more ecologically homes and businesses, your clients will appreciate that you are taking that first large step toward a greener economy and way of life.

### The EnviroLight Advantage – Financial Benefits

Installing the EnviroLight is more affordable than installing a traditional Billboard Lighting Kit. When you choose the EnviroLight, you cost your installation costs in all of the following areas

- **Trench Wiring** – with the EnviroLight you do not need to run underground wire from the nearest electrical transformer to your billboard. **Save approximately \$4.50 per foot of wire!**
- **Trenching** – Because the EnviroLight is a completely standalone, self-contained Billboard Lighting System, you do not need to pay the additional costs of digging trenches for your underground wiring. **Save approximately \$7.50 per foot of trenching!**
- **Replacement Landscaping** – Because you do not have to trench to install the EnviroLight, there is no additional cost for replacing and repairing the ground that is torn up during the trenching process.
- **Land Usage Rights** – With no need for external wire connections, etc, the EnviroLight allows you, the outdoor advertiser to provide consistent, affordable lighting to your billboard locations without the need to negotiate with property owners to use their property for underground wiring and landscaping.
- **No Electric Meter** – With the EnviroLight there is no need to meter your Billboard Lighting System. This means you save the cost of purchasing and installing a meter, and the electrical connection fees. **Save approximately \$200 on your meter, and the standard new connection fees from the local electric utility!**
- **No Electric Usage and Demand Charges** – Because the EnviroLight is entirely Solar Powered, you do not need to pay for electrical usage. Assuming an electrical price of \$0.16 per KWH (the current price in New York State), and 4 Holophane AdVue Lights on your billboard, you can **save over \$1,000 a year in electrical costs.**



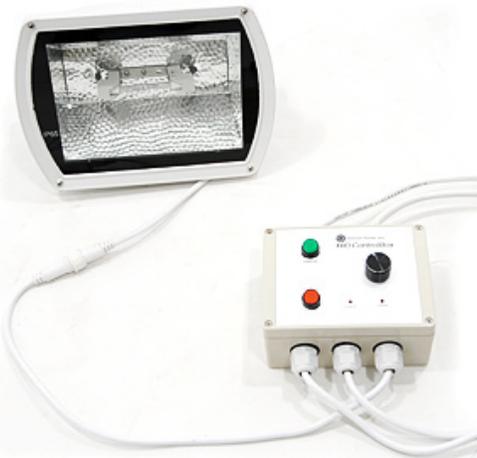
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# EnviroLight Series Solar Billboard Lights

## HID Light Fixture



The EnviroLight utilizes some of today's most advanced, cutting edge technology to provide maximum efficiency and performance in a cost-effective package that can be purchased and installed for a fraction of the cost of closest competitors.

### Electronic Control

In order to reduce the warm up time of the EnviroLight Solar Billboard Lighting Systems, and compensate for lamps as they age, a specially designed electronic control system has been developed to deliver a consistent and even flow of power to the lamp once the arc has been struck to begin lighting.

Recently, innovations in Metal Halide and other HID Lamp technology have made it possible to deliver High Output, Daylight Quality Colors - all at prices and energy usage far below those of traditional lighting sources.

The EnviroLight utilizes the very best of these technological advancements by incorporating a Single Stage, Switch-Mode DC Input Lamp Driver which has been optimized for Ultra-High Efficiency. This means - reductions in power consumption, weight, size and cost.

### Ultra-High Efficiency

The Electronic Controller within the EnviroLight is designed to deliver maximum light output with minimal power input. These controllers are designed to drive High Intensity Discharge Lamps with losses of less than 10%. The EnviroLight Solar Billboard Lighting Systems use a 35W Input Bulb - allowing for losses of less than 3W.

### How It Works

The Electronic Controller in the EnviroLight is designed to be able to strike and run a number of HID lamps from a Low DC Voltage Source. To achieve this in an affordable way, the EnviroLight uses a High Frequency Resonance Technique instead High Intensity AC Input to start the lamp. This new technique provides superior starting characteristics, and reduces the possibility of interference with radio communications and other electronic equipment.



**Above (top)**  
An EnviroLight Solar Billboard Light Fixture and Dual Purpose Charge/Lighting Controller connected for operation.

**Above (bottom)**  
Close-up view of the HID Metal Halide Light Bulb used by the EnviroLight Solar Billboard Lighting Systems. The Light bulbs draws at a 35W rate, but features light output equal to a traditional 400W light bulb.



# EnviroLight Series Solar Billboard Lights

## Dual-Purpose Controller & Solar Panel



### Dual Purpose Controller

In order to save you money and time, we have created a unique, proprietary controller for the EnviroLight Solar Billboard Lighting Systems. These controllers are built specifically for the EnviroLight, and operate in a dual capacity. Firstly, the Controller operates as a charge controller – ensuring that your battery backup is never overcharged and damaged. Second, the Controller also controls the EnviroLight Lighting System – providing a manual ON/OFF Override switch, and settings for your EnviroLight to run automatically for 4, 6 or 8 hours every night.

While most Billboard Lighting Systems will use two controllers for these separate jobs, Silicon Solar has combined the two into one space and money saving component.



### GridMaxx SI Solar Panels

The EnviroLight uses 110W GridMaxx SI Crystalline Solar Panels to provide the charging capacity for your Solar Billboard Lighting System. These Solar Panels are highly-efficient, low-cost, and are UL and CE Listed – ensuring the highest quality and performance in every panel.

Depending on your EnviroLight Kit, your location, the Size of your Billboard, and the number of hours you intend to operate your EnviroLight every night, the number of Solar Panels your Kit includes will vary.

#### **Above (top)**

*The HID Controller used in the EnviroLight. Dual-Purpose - charge controller and lighting controller in one.*

#### **Above (bottom)**

*110W GridMaxx SI Crystalline Solar Panel used in the EnviroLight Solar Billboard Lighting Systems - Solar Panel is UL and CE Listed, high-efficiency, and affordably priced.*

Unlike many companies that offer pre-packaged, one-size-fits-all Solar Billboard Lighting Kits, the EnviroLight is completely customized – each unique kit is fitted with exactly the right number of Solar Panels and Batteries to provide the best performance at the best price.



# EnviroLight Series Solar Billboard Lights

## Solar Panel Mounting Hardware Options

One of the most important and time saving components you can purchase for your EnviroLight Solar Billboard Lighting Kit is Solar Panel Mounting Hardware. These pre-fabricated hardware kits are designed to fit the Solar Panels used in the EnviroLight Kits, and are available to fit any number of solar panels.

### Solar Panel Mounting Hardware

The size, type and price of your Solar Panel Mounting Hardware is determined by the number of Solar Panels your EnviroLight System has, and how/where you intend to mount your solar panels to your billboard.

- **Top/Ground Mounting Hardware** – this hardware can be used to mount your solar panels on sides or top of your Billboard Structure, or on the ground away from your billboard.
  - 1 Panel: \$54.00
  - 2 Panel: \$95.00
  - 3 Panel: \$192.00
  - 4 Panel: \$220.00
  - 5 Panel: \$286.00
  - 6 Panel: \$384.00
  
- **Side of Pole Mounting Hardware** – this hardware can be used to attach your solar panels to the side of an existing or new pole on or remote from your billboard structure. You can also use these hardware kits to attach the Solar Panels to the main support pole of your Billboard Structure.
  - 1 Panel: \$76.00
  - 2 Panel: \$171.00
  
- **Top of Pole Mounting Hardware** – this hardware can be used to mount your solar panels to the top of an existing or new pole.
  - 1 Panel: \$66.00
  - 2 Panel: \$203.00
  - 3 Panel: \$225.00
  - 4 Panel: \$285.00
  - 6 Panel: \$485.00

If you have chosen an EnviroLight Custom, and your configuration has more Solar Panels than are listed in this price matrix for mounting hardware, please ask your sales professional to assist you in find Solar Panel Mounting Hardware for your solar panels before you place your order.



# EnviroLight Series Solar Billboard Lights

## EnviroLight Sizing Information

In order for your EnviroLight Solar Billboard Lighting Kit to function effectively, efficiently, and reliably, you must ensure that you have chosen the right EnviroLight Solar Billboard Light Kit, and that you have sized your Solar Panel Array and Battery Backup large enough to meet the needs of your application and location. The following information is meant to guide you along the path to sizing an EnviroLight Solar Billboard Lighting Kit that is perfect for you.

Choose the right kit – there are different EnviroLight Packages for different sized billboards:

- 1 Sided, up to 30 ft wide – EnviroLight X
- 2 Sided, up to 30 ft wide – EnviroLight 2X
- 2 Sided, up to 40 ft wide – EnviroLight 4X
- More Sides, Larger Sizes – EnviroLight Custom

With the right EnviroLight chosen, you need to determine how many solar panels, and how large of a battery backup you need for your EnviroLight Solar Billboard Light. To determine these factors you will need to account for a number of variables about your Billboard, and your EnviroLight Solar Billboard Light.

- 1. EnviroLight Package** – because the different EnviroLights have different numbers of light fixtures, they draw different amounts of power, and due to these changes in power requirements, your solar panels and battery backup need to be sized to account for these power requirement increases and/or decreases.
- 2. Location** – every location across the United States and around the world is different from all other locations. The following solar factors vary from location to location, and important in sizing your EnviroLight Solar Billboard Lighting Kit
  - Solar Isolation Levels
  - Sun Angle/Direction
  - Length of Day
  - Outdoor Temperature
- 3. Hours of Operation** – how long you intend to run your EnviroLight each and every night is a major factor in how many solar panels, and what size battery backup you need. EnviroLight Solar Billboard Lighting Kits are designed to operate 4, 6 or 8 hours a night – and the longer your light runs, the more power that it is drawing, and the larger the battery capacity and solar panel array (charging capacity) you need in order to keep your EnviroLight functioning right.

Using all of the information above, your EnviroLight Professional will be able to determine which EnviroLight Kit is right for you, how large your solar panel needs to be to sufficiently recharge your batteries day after day, and how large of a battery backup you need to light your sign all night every night, with a safe margin of error for overcast protection.



# EnviroLight Series Solar Billboard Lights

## EnviroLight X



<b>SKU</b>	06-1135
<b>Price</b>	\$2,105.00
<b>Light Fixtures</b>	1 (1 per side)
<b>Weight</b>	TBD by System Sizing
<b>Manufacturer</b>	Silicon Solar Inc
<b>Solar Panel Configs</b>	2 (1 panel/2 pane)
<b>Battery Configs</b>	5 (108ahr - 528ahr)

The EnviroLight X is designed to illuminate 1 side of a any Billboard up to 30 ft wide. The base configuration for the EnviroLight includes 1 HID Light Head (1 per side), 1 Dual Purpose (Charge/Lighting) Controller, Wiring, and Battery/Controller Storage. When ordering your EnviroLight you must size and purchase the Solar Panels and Battery Backup for your EnviroLight. The Configuration Options for the EnviroLight X are:

### Solar Panels

- 1 Panel: \$565.00 (plus base price)
- 2 Panels: \$1,130.00 (plus base price)

### Battery Backup

- 108 AHR: \$280.00 (plus base price)
- 210 AHR: \$532.00 (plus base price)
- 318 AHR: \$812.00 (plus base price)
- 420 AHR: \$1,064.00 (plus base price)
- 528 AHR: \$1,344.00 (plus base price)

Other optional components for the EnviroLight Include; Solar Panel Mounting Hardware Kits for ground/sign/pole mounting options, and weatherproof metal battery/controller storage boxes - ask your EnviroLight Professional about these options today.

Base Price includes Light Fixtures, Wiring, controller/battery storage, and lighting/charge controller. Solar Panels and Batteries are customized for each system, and are added to the original base price of the system to ensure optimum performance and system efficiency.



# EnviroLight Series Solar Billboard Lights

## EnviroLight 2X



<b>SKU</b>	16404
<b>Price</b>	\$2,740.00
<b>Light Fixtures</b>	2 (1 per side)
<b>Weight</b>	TBD by System Sizing
<b>Manufacturer</b>	Silicon Solar Inc
<b>Solar Panel Configs</b>	2 (2 panel/3 panel)
<b>Battery Configs</b>	5 (210ahr - 630ahr)

The EnviroLight 2X is designed to illuminate both sides of any Billboard up to 30 ft wide. The base configuration for the EnviroLight includes 2 HID Light Head (1 per side), 1 Dual Purpose (Charge/Lighting) Controller, Wiring, and Battery/Controller Storage. When ordering your EnviroLight you must size and purchase the Solar Panels and Battery Backup for your EnviroLight. The Configuration Options for the EnviroLight 2X are:

### Solar Panels

- 2 Panel: \$1,130.00 (plus base price)
- 2 Panels: \$1,700.00 (plus base price)

### Battery Backup

- 210 AHR: \$532.00 (plus base price)
- 318 AHR: \$812.00 (plus base price)
- 420 AHR: \$1,064.00 (plus base price)
- 528 AHR: \$1,344.00 (plus base price)
- 610 AHR: \$1,596.00 (plus base price)

Other optional components for the EnviroLight 2X Include; Solar Panel Mounting Hardware Kits for ground/sign/pole mounting options, and weatherproof metal battery/controller storage boxes - ask your EnviroLight Professional about these options today.

Base Price includes Light Fixtures, Wiring, controller/battery storage, and lighting/charge controller. Solar Panels and Batteries are customized for each system, and are added to the original base price of the system to ensure optimum performance and system efficiency.



# EnviroLight Series Solar Billboard Lights

## EnviroLight 4X



<b>SKU</b>	5352
<b>Base Price</b>	\$4,370.00
<b>Light Fixtures</b>	4 (2 per side)
<b>Weight</b>	TBD by System Sizing
<b>Manufacturer</b>	Silicon Solar Inc
<b>Solar Panel Configs</b>	4 (3,4,5,and 6 Panel)
<b>Battery Configs</b>	5 (210ahr - 630ahr)

The EnviroLight X is designed to illuminate 1 side of a any Billboard up to 30 ft wide. The base configuration for the EnviroLight includes 1 HID Light Head (1 per side), 1 Dual Purpose (Charge/Lighting) Controller, Wiring, and Battery/Controller Storage. When ordering your EnviroLight you must size and purchase the Solar Panels and Battery Backup for your EnviroLight. The Configuration Options for the EnviroLight X are:

### Solar Panels

- 3 Panel: \$1,700.00 (plus base price)
- 4 Panels: \$2,265.00 (plus base price)
- 5 Panels: \$2,830.00 (plus base price)
- 6 Panels: \$3,400.00 (plus base price)

### Battery Backup

- 210 AHR: \$532.00 (plus base price)
- 318 AHR: \$812.00 (plus base price)
- 420 AHR: \$1,064.00 (plus base price)
- 528 AHR: \$1,344.00 (plus base price)
- 630 AHR: \$1,596.00 (plus base price)

Other optional components for the EnviroLight Include; Solar Panel Mounting Hardware Kits for ground/ sign/pole mounting options, and weatherproof metal battery/controller storage boxes - ask your EnviroLight Professional about these options today.

Base Price includes Light Fixtures, Wiring, controller/battery storage, and lighting/charge controller. Solar Panels and Batteries are customized for each system, and are added to the original base price of the system to ensure optimum performance and system efficiency.



# EnviroLight Series Solar Billboard Lights

## EnviroLight Custom



<b>SKU</b>	elightcustom
<b>Price</b>	TBD by System Sizing
<b>Light Fixtures</b>	TBD by System Sizing
<b>Weight</b>	TBD by System Sizing
<b>Manufacturer</b>	Silicon Solar Inc
<b>Solar Panel Configs</b>	2 (1 panel/2 pane)
<b>Battery Configs</b>	5 (108ahr - 528ahr)

Not all billboards are built the same. In fact, some are much larger than others - some are three sided - some are more than 60 ft long - some are much taller than others. If this is the case with your billboard, it is pretty likely that our pre-packaged EnviroLight kits will be inadequate for providing light to the entire billboard. That is why we offer the EnviroLight Custom - a totally customizable Solar Billboard Lighting Kit.

Our professional product specialists will work with you to determine how many light fixtures, controllers, batteries and solar panels you will need in order to illuminate your billboard with EnviroLight Solar Billboard Lights. To get an EnviroLight Custom for your outdoor advertisements, call the EnviroLight Sales Team today. With the EnviroLight Custom, your entire kit will be custom sized to your needs, including batteries, solar panels, light fixtures, controllers, wiring, storage, and more.

Other optional components for the EnviroLight Include; Solar Panel Mounting Hardware Kits for ground/sign/pole mounting options, and weatherproof metal battery/controller storage boxes - ask your EnviroLight Professional about these options today.

Base Price includes Light Fixtures, Wiring, controller/battery storage, and lighting/charge controller. Solar Panels and Batteries are customized for each system, and are added to the original base price of the system to ensure optimum performance and system efficiency.



# Commercial Solar Sign Lights

## EnviroLight Sizing Questionnaire

Name	
Company	
Address	
Phone	
Email	
Best Time to Contact	
Location of Billboard (city & state)	
Height of Billboard	
Width of Billboard	
# of Sides to Light (1, 2, 3, etc)	
Hours to Light (each night) (4, 6, 8 hours)	

**Please fill out the above form and return it to Silicon Solar in for professional EnviroLight Solar Billboard Light Sizing. You can return this form by fax or mail to:**

**Fax: (866) 746-5508 Attn: EnviroLight Sizing**

**Mail: Silicon Solar Inc  
2917 State Hwy 7  
Bainbridge, NY 13733**



# Commercial Solar Sign Lights

## Frequently Asked Questions

### **How much money can I save with an EnviroLight Solar Billboard Light?**

There is no easy way to answer this. First, think of all of the costs that you have when installing a traditional Billboard Sign Light – cost of trenching wire and repairing the landscape, installation of meters, transformers, and electrical connection fees. Second, think of the amount of money that you spend on electrical usage – the number of kilowatt hours you spend use each month to light a billboard times the current (and increasing) cost of electricity. All of these fees and costs added up over the lifetime of your EnviroLight are what you can expect to save. Your EnviroLight will pay for itself several times over.

### **I have heard that solar energy is less reliable than regular electric. Is this true?**

No, this is simply not true. Solar Energy, and the EnviroLight in particular, are very efficient and reliable. Each system comes with a specially sized solar panel array and battery backup that is designed to provide several days of overcast protection in case bad weather persists in your location for than a day or two at a time.

### **How big of a sign can the EnviroLight illuminate?**

The EnviroLight X is perfect for lighting a single-sided billboard up to 30 feet wide. The EnviroLight 2X will light up a double-sided billboard up to 30 feet wide, and the EnviroLight 4X will light up a double sided sign up to 40-48 feet wide. If your billboard is larger than these, or has 3 or more sides, our EnviroLight Custom can be sized to illuminate any billboard, of any size.

### **What is the difference between base price and total price?**

The base price of an EnviroLight is the price that includes the light fixtures, wiring, controller/battery storage, and the charge/lighting controller. In order for your EnviroLight to function properly and reliably, it will need a custom sized solar panel array and battery backup. Because each EnviroLight will need different sized solar panel arrays and battery backups, we add these features onto the base price when the system is sized – this is much like buying a computer and choosing the size monitor or hard drive you wish it to come with.

### **I have billboards in the northeast where the winter days are short, and the temperatures are very cold – can an EnviroLight can still be used in these areas?**

Yes, we take all of these factors into account when we determine how many solar panels and what size battery backup you need to have before we even quote you for your EnviroLight. We have EnviroLights in operation in Upstate New York already, each of them operating perfect in the winter conditions.