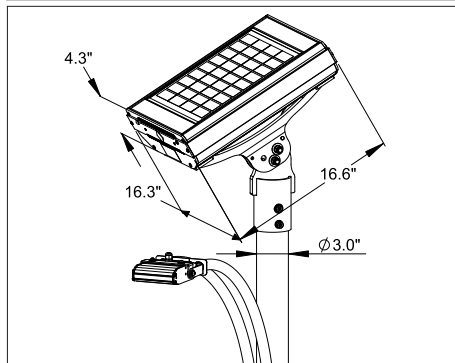


## SPECIFICATIONS

### SE-10



#### SOLAR MODULE\*

Peak power	10 watts
Current at peak power	0.57 amps
Voltage at peak power	17 volts
Open circuit voltage	21 volts
Short circuit current	0.62 amps
Construction	High efficiency, polycrystalline

#### MECHANICAL

Housing	Corrosion resistant aluminum
Support bracket	Hardened steel
Finish	Powder coated
Hardware	Stainless steel
Mounting angles	0°, 15°, 30°, 45°, 60°
Effective projected area**	240 in <sup>2</sup> (1548 cm <sup>2</sup> )
Weight	41 lbs (19 kg)

#### BATTERY\*

Nominal Voltage	12 volts
Capacity	17.2 (typical) amp hours
Construction	Maintenance-free, sealed lead acid

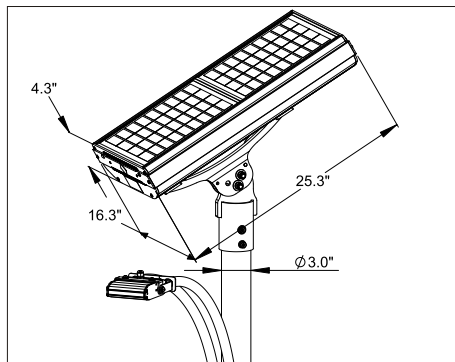
#### PERIPHERALS

LED-4 Luminaire
LED-4 Luminaire mounting arm

#### ENERGY MANAGEMENT SYSTEM

Operating profile	Configurable (see lighting profiles)
Power management	Microsource code suite
Autonomy	5-15 days typical (configuration dependant)

### SE-20



#### SOLAR MODULE\*

Peak power	20 watts
Current at peak power	1.14 amps
Voltage at peak power	17 volts
Open circuit voltage	21 volts
Short circuit current	1.24 amps
Construction	High efficiency, polycrystalline

#### MECHANICAL

Housing	Corrosion resistant aluminum
Support bracket	Hardened steel
Finish	Powder coated
Hardware	Stainless steel
Mounting angles	0°, 15°, 30°, 45°, 60°
Effective projected area**	360 in <sup>2</sup> (2322 cm <sup>2</sup> )
Weight	62 lbs (28 kg)

#### BATTERY\*

Nominal Voltage	12 volts
Capacity	34.4 (typical) amp hours
Construction	Maintenance-free, sealed lead acid

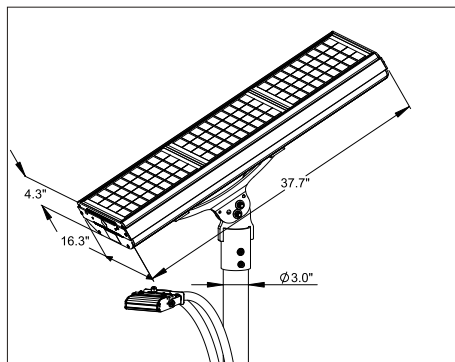
#### PERIPHERALS

LED-4 Luminaire
LED-4 Luminaire mounting arm

#### ENERGY MANAGEMENT SYSTEM

Operating profile	Configurable (see lighting profiles)
Power management	Microsource code suite
Autonomy	5-15 days typical (configuration dependant)

### SE-30



#### SOLAR MODULE\*

Peak power	30 watts
Current at peak power	1.71 amps
Voltage at peak power	17 volts
Open circuit voltage	21 volts
Short circuit current	1.86 amps
Construction	High efficiency, polycrystalline

#### MECHANICAL

Housing	Corrosion resistant aluminum
Support bracket	Hardened steel
Finish	Powder coated
Hardware	Stainless steel
Mounting angles	0°, 15°, 30°, 45°, 60°
Effective projected area**	535 in <sup>2</sup> (3452 cm <sup>2</sup> )
Weight	84 lbs (38 kg)

#### BATTERY\*

Nominal Voltage	12 volts
Capacity	51.6 (typical) amp hours
Construction	Maintenance-free, sealed lead acid

#### PERIPHERALS

LED-4 Luminaire
LED-4 Luminaire mounting arm

#### ENERGY MANAGEMENT SYSTEM

Operating profile	Configurable (see lighting profiles)
Power management	Microsource code suite
Autonomy	5-15 days typical (configuration dependant)

## COMMON SPECIFICATIONS

#### ENVIRONMENTAL

Operating temperature range	Standard: -5° F to 122° F (-15° C to +50° C) Extended: -40° F to 176° F (-40° C to +80° C)
Wind load	Steady wind speed not to exceed 110 mph (177 km/h) Gust wind speed not to exceed 143 mph (230 km/h)
Shock	10 g's
Vibration	1 Hz, 12" amplitude, 20 years
Outdoor rated	
Direct sunlight required	

#### QUALITY STANDARDS

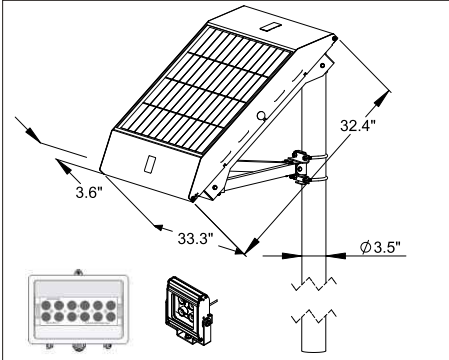
Quality certification	ISO 9001:2000 Certified Manufacturer
-----------------------	--------------------------------------

#### WARRANTY

3-year prorated warranty on complete system including batteries

\* Specification made at STC, +/- 10%  
\*\*EPA measured at steepest mounting angle.

## SE-50



### SOLAR MODULE\*

Peak power	50 watts
Current at peak power	3.1 amps
Voltage at peak power	16.0 volts
Open circuit voltage	20.6 volts
Short circuit current	3.4 amps
Construction	High efficiency, polycrystalline

### MECHANICAL

Housing	Corrosion resistant aluminum
Support bracket	Hardened steel
Finish	Powder coated
Hardware	Stainless steel
Mounting angle	45°
Effective projected area**	761 in <sup>2</sup> (4910 cm <sup>2</sup> )
Weight	121 lbs (55 kg)

### BATTERY\*

Nominal Voltage	12 volts
Capacity	51.6 (typical) amp hours
Construction	Maintenance-free, sealed lead acid

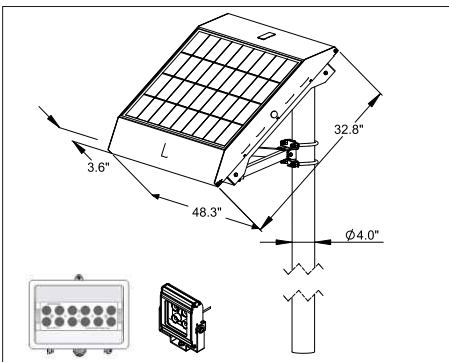
### PERIPHERALS

LED-12 Luminaire	
LED-4 Luminaire	
LED-4 Luminaire mounting arm	

### ENERGY MANAGEMENT SYSTEM

Operating profile	Configurable (see lighting profiles)
Power management	Microsource code suite
Autonomy	5-15 days typical (configuration dependant)

## SE-80



### SOLAR MODULE\*

Peak power	80 watts
Current at peak power	4.66 amps
Voltage at peak power	17.2 volts
Open circuit voltage	21.6 volts
Short circuit current	5.05 amps
Construction	High efficiency, polycrystalline

### MECHANICAL

Housing	Corrosion resistant aluminum
Support bracket	Hardened steel
Finish	Powder coated
Hardware	Stainless steel
Mounting angle	45°
Effective projected area**	1120 in <sup>2</sup> (7226 cm <sup>2</sup> )
Weight	177 lbs (80 kg)

### BATTERY\*

Nominal Voltage	12 volts
Capacity	86.0 (typical) amp hours
Construction	Maintenance-free, sealed lead acid

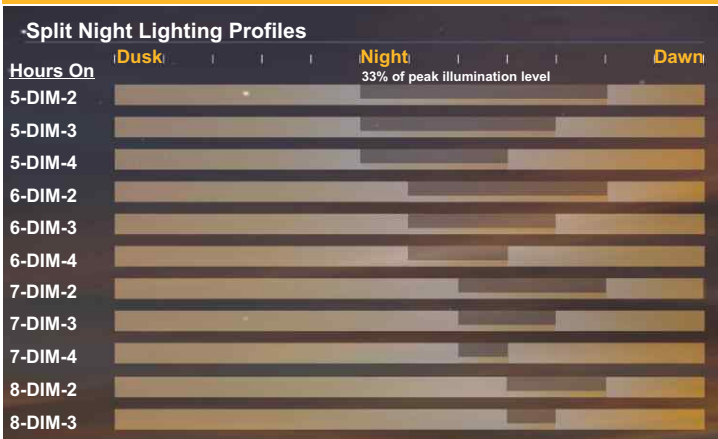
### PERIPHERALS

LED-12 Luminaire	
LED-4 Luminaire	
LED-4 Luminaire mounting arm	

### ENERGY MANAGEMENT SYSTEM

Operating profile	Configurable (see lighting profiles)
Power management	Microsource code suite
Autonomy	5-15 days typical (configuration dependant)

## LIGHTING PROFILES



Specifications may be subject to change. Carmanah Technologies Corporation assumes no liability for third party products and services used in the installation of this product and work performed by third party service providers. Purchasers are advised that the security and strength of any product installation will be dependent upon the type of pole upon which the product is mounted, the footing, the fasteners and materials in fixing the product to the pole and site conditions.

Carmanah Technologies Corp.  
 Toll Free: 1.877.722.8877 (US & Canada)  
 Worldwide: +1.250.380.0052  
 Fax: +1.250.389.0040  
 Web Site: carmanah.com

Carmanah is a Canadian public corporation  
 TSX: CMH

© 2007 Carmanah Technologies Corp.  
 "Carmanah" and Carmanah logo are trademarks of Carmanah Technologies Corp.  
 Document: SPC\_EverGEN Area Lighting System\_vA

