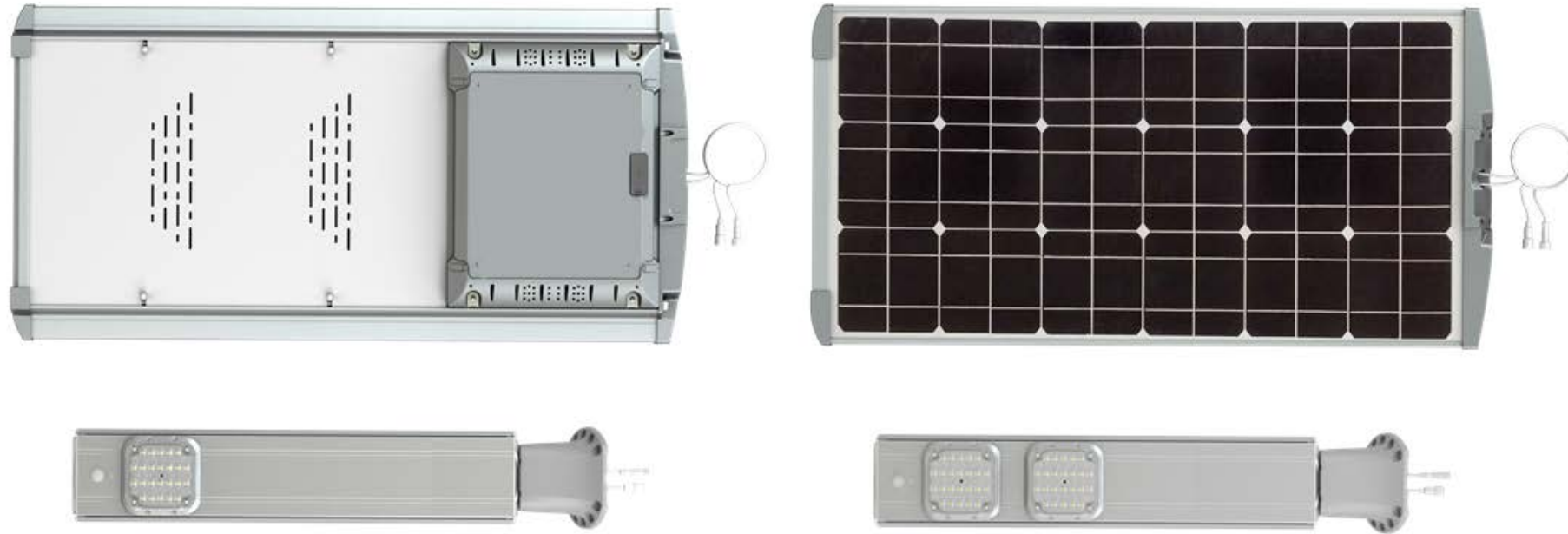


HLML ELITE

Solar StreetLight
Split Type





Simple installation, extremely practical

The ML ELITE split units can capture the maximum energy by setting the direction of a solar engine facing to the strongest solar radiation while the lamp faces to the site you want to illuminate.

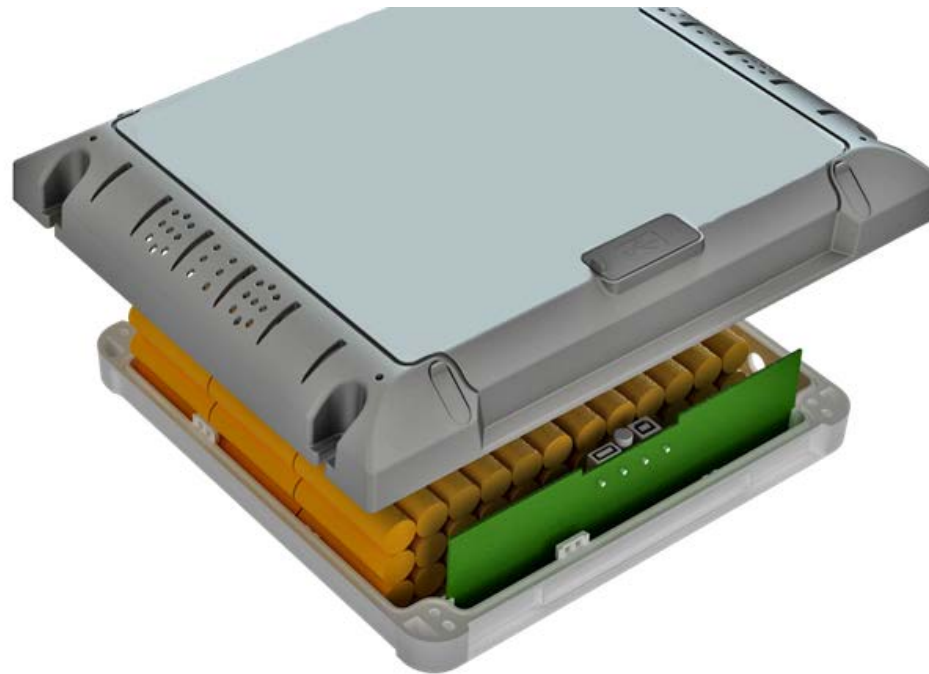
With split design, users will take the benefit of flexible installation as well as all in one features.

The ELITE will switch on when the sun sets and switch off when the sun rises. When there is no one around, it will dim itself to improve power efficiency, however, when anyone approaches, it will increase its brightness by a factor of four.



Protected against allweathers

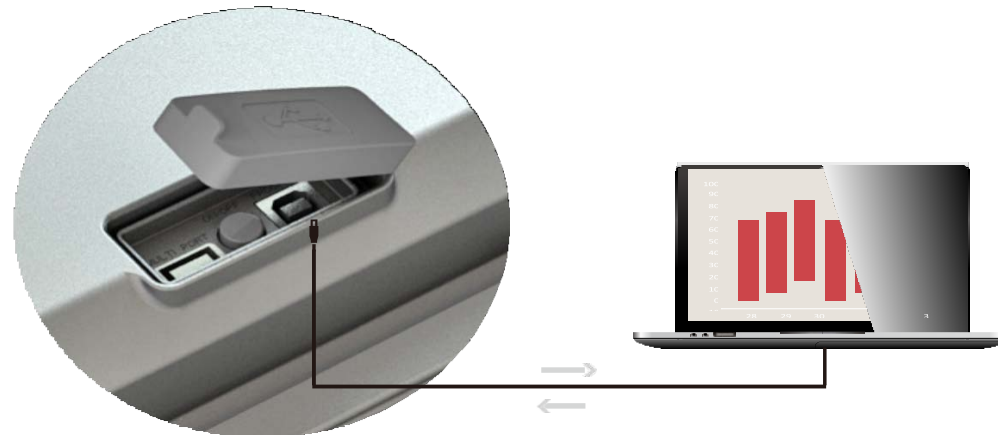
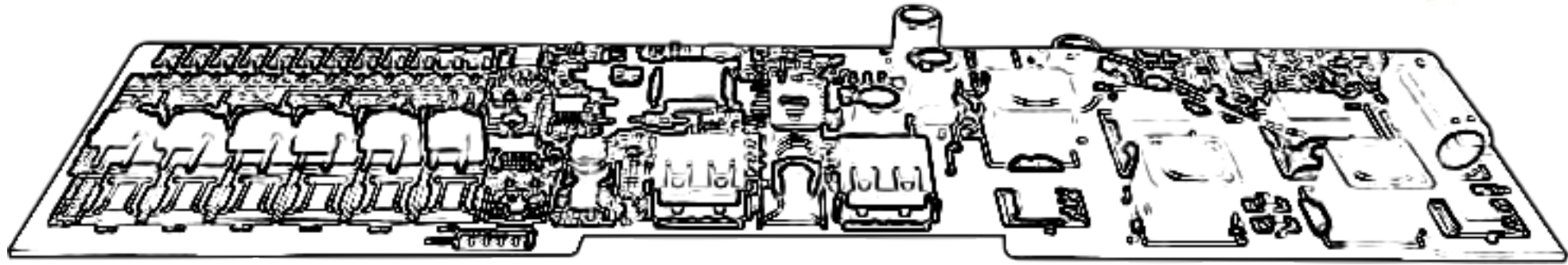
The solar streetlights have to survive extreme cold and hot weather. The modular structure of the ML ELITS is extremely good at protecting the essential parts of the streetlights. It reaches IP65 protection grade, effectively isolating humidity, dust and heat invasion, making it easy to overcome the challenges of harsh outdoor environments.



Battery determines system stability; Management determines battery's stability

Traditional solar powered streetlights use lead acid batteries that have a very short life cycle and are difficult to maintain, creating massive environmental pollution and a very low ROI.

We therefore decided to use Lithium-ion batteries that have **3 times** the life cycle, **4 times** the discharge ability and are not harmful to the environment in our sealed product. However, Lithium-ion batteries need a proper battery management system to avoid the “barrel effect”. ML uses an exclusive patented technology battery management program, enabling the life span of battery to last for over 6 years, greatly improving the ROI and at the same time helping to sustain the earth's resources. When the optional extreme low temperature protection device is installed, ELITE can work at **-40F**, thus making it suitable for alpine regions.



High performance charging controller, provides full protection for the system

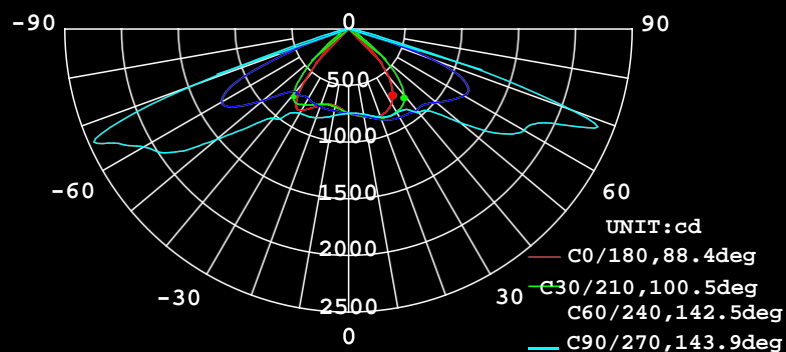
The independent researched and developed charging controller generates more power, especially during cloudy & rainy days. It simultaneously has protection for over current, over voltage and overheating. Through the USB interface on the controller, it is able to easily modify its operating mode.



CREE LED ALUMINUM LAMP BASE creates a first-class light source

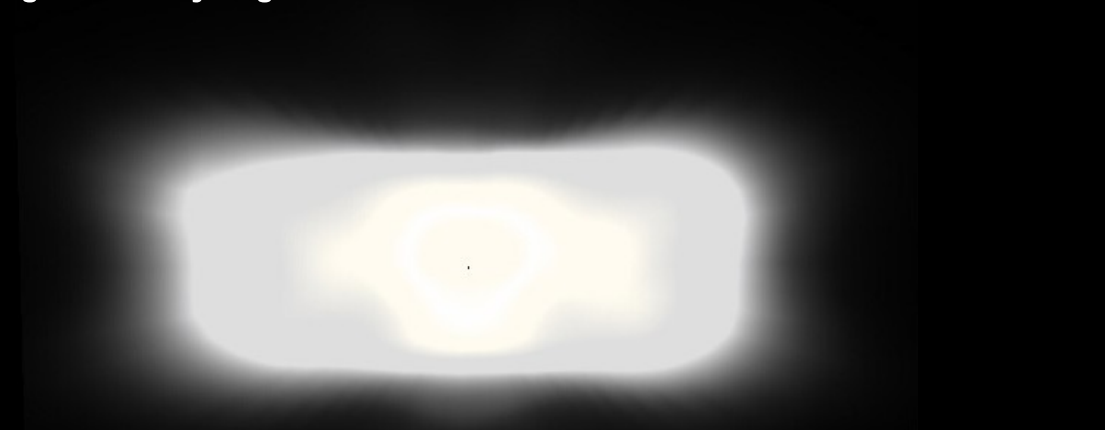
By choosing the CREE 5W LED chips, single lumen value at **130lm/W** (@350mA), with the aluminum lamp base and sealed lens, with its excellent heat dissipation, it is as if the LED chip has been placed in a sealed unit. Thus it maintains high brightness levels with very little fading. The sealed lenses are made of strong UV protected PC and are aging and shock

Bat wing light distribution curve



AVERAGE BEAM ANGLE(50%):118.8 DEG

Light intensity diagram



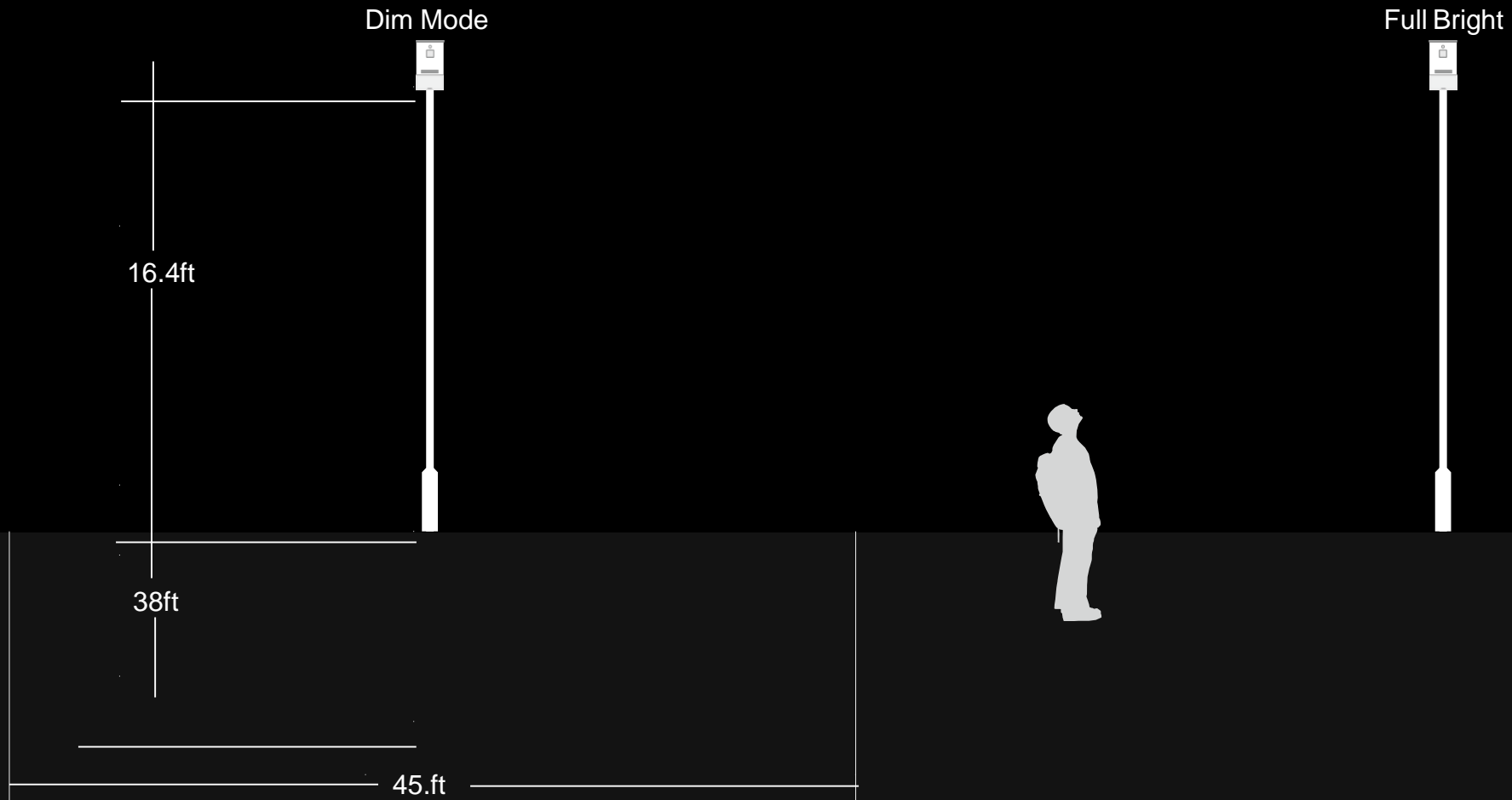


SUPER ALUMINUM FRAME makes this a tough unit

ML ELITS uses a super aluminum frame, which is light weight, strong and corrosion resistant, making it able to resist strong typhoons of up to **force 12**. Stainless steel screws are used as fasteners to protect against any harsh weather

Motion detection

ML ELITE comes complete with built-in motion detection system that automatically regular the light source from full bright (100%) to dim mode (25%) to increase battery autonomy.



Infrared motion sensor detection area

Solar Engine Technical Data

√ : Standard, /: N/A

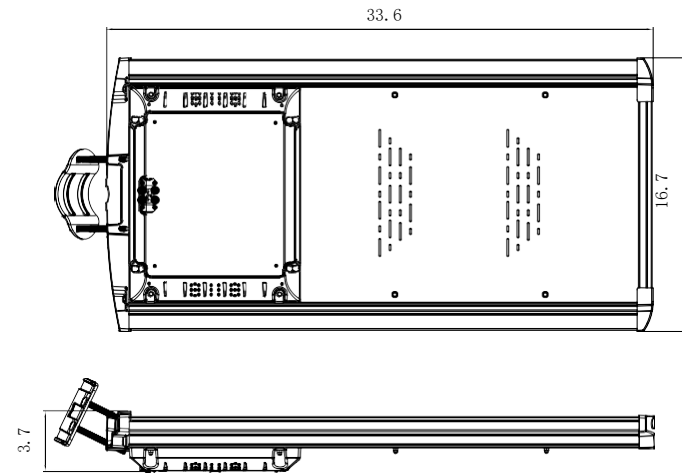
Model No.	HLML-ES-20	HLML-ES-40	HLML-ES-60	HLML-ES-80	HLML-ES-100
Power of PV Module (W)	35	50	70	100	200
Lithium Battery Capacity (Wh)	192	308	422	500	1000
Battery Heating Function	/	/	/	/	H LI- Battery
Dimension of Product (in)	23.6×16.7×3.7	33.6×16.7×3.7	43.8×16.7×3.7	62.5×16.7×3.77	62.5 x 33.4 x 3.77
Net Weight of Product (lbs)	18.7	23.1	29.7	8	16
Dimension of Carton (in)	25.3×10.2×18.8*	36.4×10.2×18.8*	46.6×5.7×18.8*	65.3×5.7×18.8*	65.3 x 11.4 x 18.8*
Gross Weight of Product (lbs)	46.2 *	55.1 *	33*	23	32
Charge Temperature (°C)	32F~140F	32F~140F	32F~140F	32F~140F	32F~140F
Discharge Temperature (°C)	-4F~140F	-4F~140F	-4F~140F	--4F~140F	--4F~140F
Storage Temperature (°C)	32F~113F	32F~113F	32F~113F	32F~113F	32F~113F
Recommended Diameter of Lamppost (in)	2.9~3.5	2.9~3.5	2.9~3.5	2.5~2.7	2.5~2.7

LED Street Light Technical Data

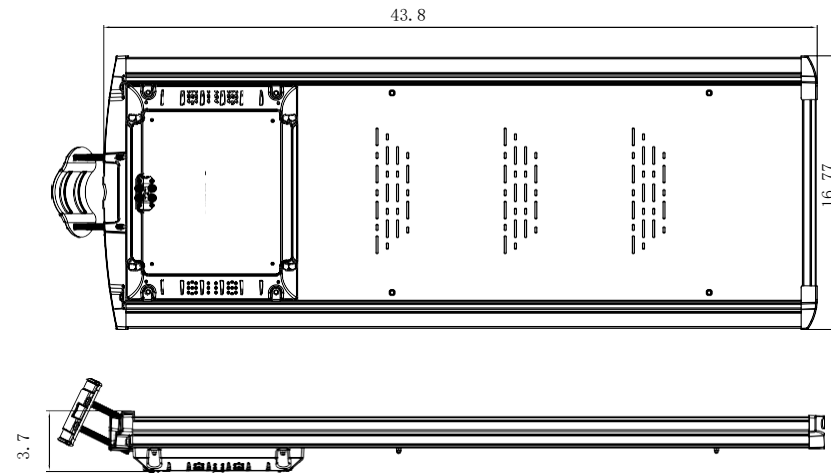
√ : Standard, /: N

Model No.	HLML-ES-20	HLML-ES-40	HLML-ES-60	HLML-ES-80	HLML-ES-100
Light output (W)	15	20	30	50	50
Typical Luminous Flux (lm)	1800	2400	3600	6000	6000
LED Chip	CREE 5W LED	CREE 5W LED	CREE 5W LED	CREE 5W LED	CREE 5W LED
Qty. of LED Chips (pcs)	10	18	24	36	36
Optical Distribution	Bat Wing	Bat Wing	Bat Wing	Bat Wing	Bat Wing
Visual Angle (°)	140°x 70°	140°x 70°	140°x 70°	140°x 70°	140°x 70°
Color Temperature (K)	5000	5000	5000	5000	5000
Light Photosensitivity (lx)	30	30	30	30	30
PIR Sensor	√	√	√	√	√
Working Temperature (°C)	-40F~140F	-40F~140F	-40F~140F	-40F~140F	-40F~140F
Storage Temperature (°C)	-4F~113F	-4F~113F	-4F~113F	-4F~113F	-4F~113F
Dimension of Product (in)	28.5×5.03×2.8	28.5×5.03×2.8	28.5×5.03×2.8	32.4×5×2.8	32.4×5×2.8
Net Weight of Product (lbs)	8.3	8.3	8.3	11	11
Dimension of Carton (in)	29.9×8.66×9.44	29.9×8.66×9.44	29.9×8.66×9.44	34.6×8.66×9.44	34.6×8.66×9.44
Gross Weight of Product (lbs)	11.4	11.4	11.4	14.33	14.33
Recommended Installation Height (f)	9.84~16.4	13.1~19.6	16.4~22.9	19.6~26.2	19.6~26.2
Recommended Installation Distance (f)	39.3~65.6	49.2~98.4	82~114.8	98.4~131.2	98.4~131.2
Recommended Diameter of Lamppost (in)	2.55~3.54	2.55~3.54	2.55~3.54	2.55~3.54	2.55~3.54

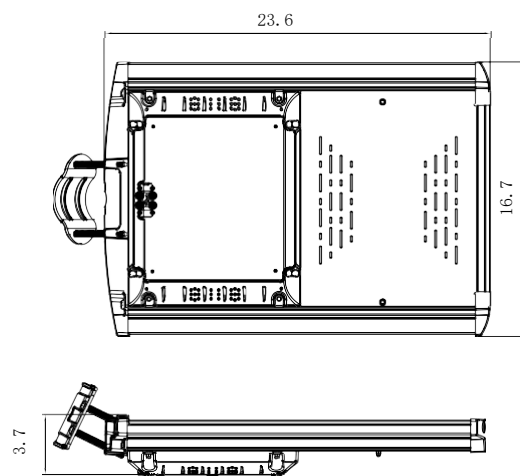
Physical Dimensions (in)



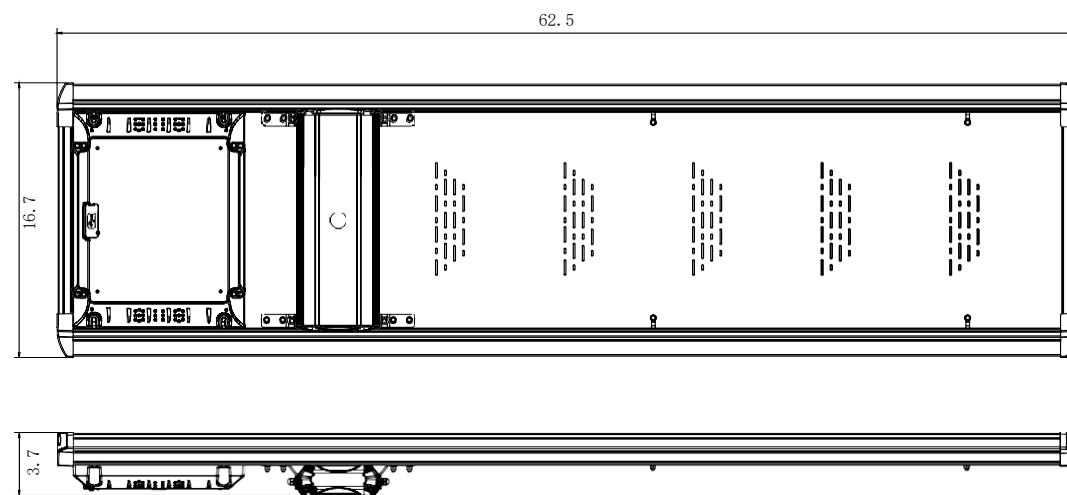
HLML-ES-40



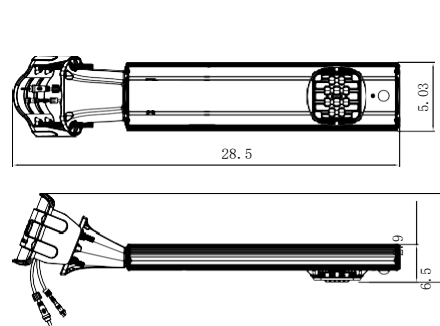
HLML-ES-60



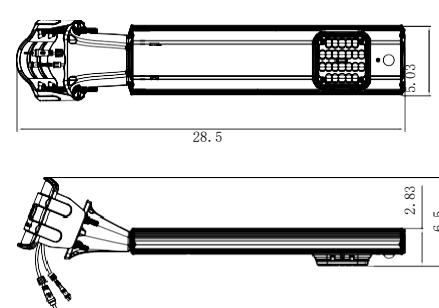
HLML-ES-20



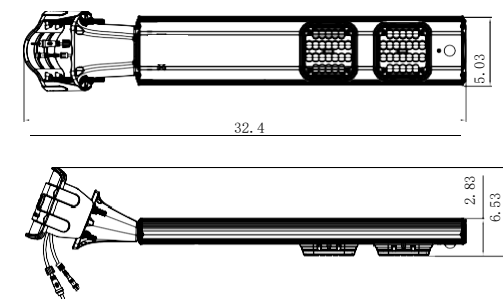
HLML-ES-80



HLML-ES-20



HLML-ES-40/ HLML-ES-60



HLML-ES-80