



**ARKIMEDE Pole Street Light
Photovoltaic – Micro Wind Solution**

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ARKIMEDE Street Light Pole Photovoltaic&Micro Wind Solution



The ARKIMEDE solution is a self standing Patented Street Light Pole, a fully new concept concerning the use of the combination of different sources “Wind – Solar energy”.

The combination and implementation of the 2 technologies generated, as final result, a Lighting Pole with the highest energy efficiency, the highest light wattage per pole, consequently allowing to achieve greater safety on the road especially in extreme environmental situations.





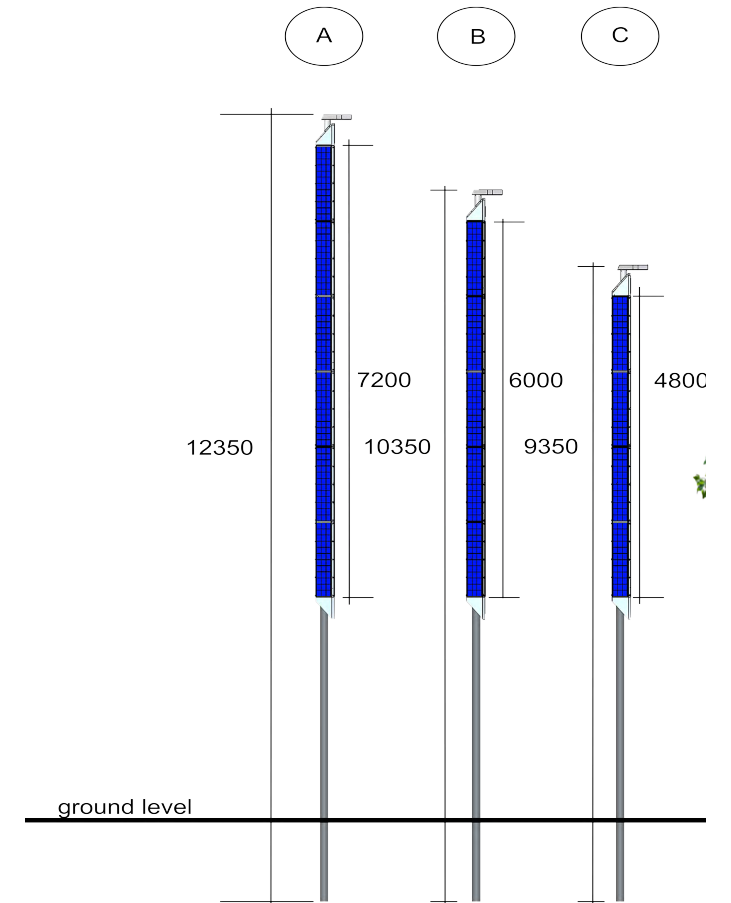
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DIMENSIONS

Akimedede Pole is designed in 3 different sizes and supplied complete, including:

- LED Street Light 25W up to 40W
(We can increase the wattage up to 110W changing the battery pack)
- 3 Faces of Photovoltaic cells
(A 900W – B 750W – C 600W)
- Basic Lithium Battery Kit 40Ah





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1.1.1. Cell specifications

Item	Specification		Note
	Capacity	Nominal	
Minimum		3900mAh	0.5C discharge
Alternating Internal Resistance	Maximum	20mΩ	AC 1 kHz
Nominal Voltage		3.2V	
Charging Voltage		3.65±0.05 V	
Standard Charge Conditions (Constant current charging and then constant voltage charging)	Current	0.5C (2000mA)	
	Voltage	3.6V	25°C±2°C
	Cut-off Current	80±5mA	0.02C
Max Charging Current	0°C≤T≤45°C	1C (4000 mA)	
Standard Discharge Conditions (Constant Current Discharge)	Current	0.5C (2000 mA)	25°C±2°C
	Cut-off Voltage	2.5±0.05V	
Max Discharge Current	Suggest 5°C≤T≤45°C	3C (12000mA)	
Working Temperature	Charge	0~45°C	
	Discharge	-20~60°C	
Storage Temperature		-20~60°C	
Weight		≤90g	
Dimension	Height	70.2±0.2mm	
	Diameter	26.2±0.2mm	
Appearance	Without break, scratch, distortion, contamination, leakage, and so on		

Technical Data Cells



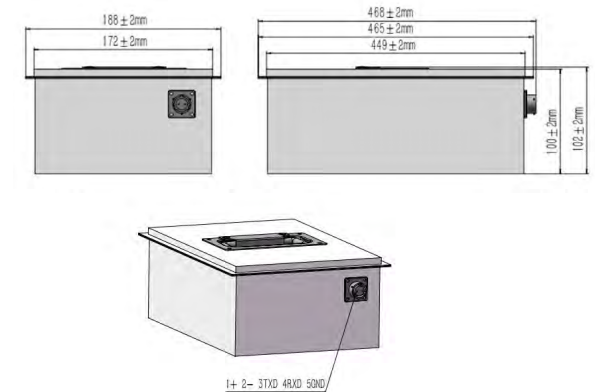
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1.2.1、 Battery related parameters

Items	Parameters	
Battery Model	IFR-25.6V48Ah (26700-3.2V-4000mAh-8S12P)	
Nominal voltage	25.6V	
Typical capacity	48±0.5Ah(At 0.2C discharge rate)	
Discharge	Working current	≤ 10A
	Cut-off voltage	About 20V
Charge	Voltage	28.8±0.2V
	Max charging Current	≤ 10A
	Charge mode	CC/CV, please use a special lithium charger
Operation Temperature	Charging cut-off current	About 480mA
	Charge	0℃~+45℃
Discharge	Discharge	-20℃~+60℃
	Storage Temperature	-20℃~60℃
Discharging Inner Resistance	≤ 80mΩ	
Protection Function	Overcharge protection、 Over discharge protection	
Connector	1+ 2- 3TXD 4RXD 5GND	
Shell Material	Metal shell	
Weight	10.0±0.2 Kg	
Size (L*W*H)	(65±2) mm * (188±2) mm * (100±2) mm	
Cycle	The cycle life is not less than 2000 times, and the capacity retention rate is ≥80%. (Charge according to 3.2 standard charge, put it aside After 0.5~1h; discharge according to the 3.3 standard, put it aside for 0.5~1h, count as 1 cycle).	

BATTERY PACK LiFe PO4 – 25.6V48Ah





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