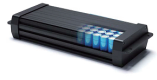
LS-LEDS820Y Vertical Solar PV Poles - Circular

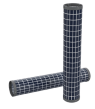
Solar energy is green and renewable. Lightingsource's vertical solar PV pole is a solar integrated lighting system requires no energy from the grid, 100% energy saving lighting solution. More and more cities look for recyclable solar energy, traditional solar lighting system can't match the style of cities either modern or classic. Its artistic designing beautify city centres like shopping malls, commercial blocks as well as campus parks and residential areas, creating distinctive and harmonious circumstance for citizens and tourists, enhancing well-being and making cities more livable.

Utilising seamless vertical integration as a clean efficient method to integrate solar photovoltaic technology into column lighting systems. Using this method, large flat solar panels are not needed, but instead are placed around the lighting pole itself. This seamlessly integrates the technology aesthetically without compromising the efficiency, adding value to both designers and end users. Vertical integration is more wind-resistant, reducing wind-loads and saving on the expensive pole foundations. It also minimises the maintenance burden of dirt or snow built up on the photovoltaic surfaces, requiring less frequent and easier cleaning. The vertical wrap around panels receive light more evenly and efficiently from the sun and sky during daylight hours, even in darker climates and seasons.

Integrated vertical PV panel into pole provides aesthetic view, avoids snow or sand collection



Using Iron Phosphate Lithium LiFePo4 battery, superior safety. Built-in protection for over-charge, over discharge, over current and over temperature



Vertical solar module consists of mono-crystalline high-efficiency cells instead of large flat panel for more wind-resistant

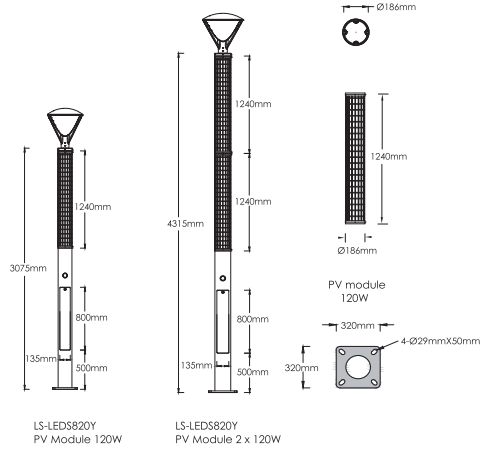
Product information

Mono-crystalline high-efficiency cells solar module / Lithium Iron Phosphate (LiFePO4) battery / Electronic protection battery management system / MPPT solar charge controller / CE, UKCA & RoHS international standards / Environmentally friendly & part recyclable: no mercury or other hazardous materials used / Integrated temperature & motion sensors / Robust aluminium structure with light weight / Complies with EN60598

Code	PV Module†	Battery LiFePO4	Lumen Output Maximum	Control Mode	Luminaires Operating 100%	STD: 2 Step Dimming with Motion Sensor Override*	Nett Weight
LS-LEDS820Y-025	120W/18V	384WH/12.8V 30Ah	4,500lm	D2D / STD / TC	15.5 hours	37.8 hours	27.5kg
LS-LEDS820Y-050	120W/18V*2	770WH/12.8V 60Ah	9,000lm	D2D / STD / TC	14.1 hours	37.3 hours	35.5kg

† Calculations are done with the 3 hours of Peak Sun Hour
* Calculations are done with 12 hours of operation per day, detection of movement is 5 times per hour
Autonomy and Operation time calculations are only indicative and will depend on several variable factors

Dimensions and mounting

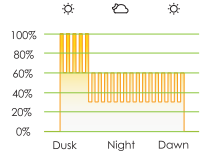


Control Mode

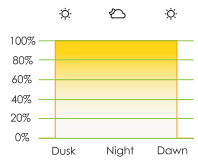
- D2D: Dusk to Dawn
- STD: Step dimming with motion sensor override (3 hours: 60% without movement, 100% for 1 minute when the motion sensor activated. After 3 hours: 30% without movement, 60% for 1 minute when the motion sensor activated)
- TC: Time Control (5 Step dimming, Custom hours, Custom dimming levels)

You can set the duration and output with remote controller

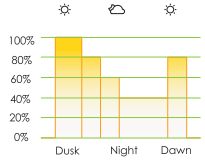
STD: Step dimming with motion sensor override



D2D: Dusk to Dawn



TC: Time Control



Technical Specification

PV Module: Mono-crystalline (25 years of anticipated lifespan)
Battery: LiFePO4 (8 years of anticipated lifespan)
Pole: Extruded aluminium with high corrosion resistant powder coating
System Design: 12/24 VDC
Solar Charge Controller: MPPT
Charging Time: 5-6 hours
Control Mode: D2D (Dusk to Dawn) / STD (Step Dimming with Motion Sensor Override / TC (Time Control)
Spigot: 60mm/76mm
Operating Temperature: -10°C to 50°C

Luminaires made to order for vertical solar PV poles


LED708 - Post Top


LED710 - Post Top


LED712S - Post Top


LED706 - Post Top


LED700Y- Post Top


LED715 - Post Top

Benefits -

- Seamless vertical integration avoids snow or sand collection on solar panel

Key Features -

- Aesthetics design to beautify the surroundings
- Truly green lighting solution and 100% energy savings
- Long anticipated lifespan of Mono-Si solar panel and LifePO4 battery
- Quick and easy installation without making electrical connections
- 360° full day charging and no onsite orientation is needed