



Soluxio P220D

The smart solar light pole

Soluxio is the most advanced and sophisticated solar light pole available on the market. The solar light pole is completely off-grid and works autonomously, using sustainable solar power. This means there is no need for expensive cabling and invasive trenching, which results in fast installation, easy operation and a low total cost of ownership (TCO).

FlexSol believes in collaboration and teamwork. Making the world a greener and a more sustainable place is not done single-handedly. That's why FlexSol is partnered with world-leading companies, such as Valmont Structures, Nedal (Purso Group Oy), Schott AG and Innolumis. Together we have built Soluxio to withstand the toughest conditions. Soluxio has proven its outstanding quality at numerous locations worldwide, from the U.S.A. to the Middle East and from Mauritius to the Netherlands. Smart machine-learning algorithms continually optimize the performance of the carbon neutral light pole. The curved vertically integrated solar panels are wind-resistant and self-cleaning, as dirt and dust cannot stick on the design. Solar energy generated during the day is stored in high-quality lithium batteries, which are long-lasting and require minimum maintenance. The highly-efficient LED-luminaire provides powerful lighting at night. All Soluxio light posts can be connected to an online platform which enables remote monitoring and management. This reduces maintenance costs and makes the light pole extremely reliable.



Cheaper than conventional street lighting

The revolutionary Soluxio is not only greener but also cheaper than conventional grid-connected street lighting.



Light-years ahead in solar technology

Years of development and innovation have led to the most advanced solar product in the market.



Year-round lighting

Powerful lighting, proven to be reliable during the whole year at any location.



Fast and easy installation

Fully installed in 45 minutes by plug-and-play design.



Over-the-air updates & connectivity

Convenient access to latest updates and innovations. Smart city applications can easily be connected.



Eco-friendly and carbon neutral

100% solar powered, no cabling, no invasive trenching. Animal-friendly editions available.



Quick return on investment

No cabling + no electricity bill + fast installation + low maintenance costs = quick return on investment.



Low total cost of ownership

High-quality components and remote monitoring result in low maintenance.

Technical specifications

Overview	
Height	5 - 12 meter / 16 - 40 feet
Column material	Steel or aluminum
Luminaire power	max. 80 W
Operating temperature	-20 to 60 oC
FlexSol Solar Module	
Solar technology	Monocrystalline silicon solar cells
Amount of solar modules	2 pcs
Cell efficiency	> 23%
Total power	> 220 Wp
Number of Maximum Power Point Tracking channels	8
Front sheet material	Borosilicate glass
Solar module backsheet colour	White (optional black backsheet)
Dimensions per module	Ø 200 x 1110 mm
Weight per module	~ 7kg
FlexSol Battery	
Battery technology	Lithium (NMC)
Battery capacity	800 Wh
Service life	~10 years
Enclosure	Integrated in FlexSol Control Unit enclosure
FlexSol Control Electronics	
On-board mobile communication	GSM LTE-M
Encryption	TLS 1.2
Global Navigation Satellite System (GNSS)	GPS, BeiDou, Galileo, GLONASS, QZSS
Over-the-Cable updateable	Yes (USB-programming device optional)
Over-the-Air updateable	Yes
Remote monitoring and configuring	Optional
Time and date	Astronomical clock
Smart city ready	Yes
Lighting	
Amount of luminaires	2 pcs
LED luminaire	FlexSol FSA-01 / FSA-04
	Innolumis Victoria / Nicole
	Other LED luminaires on request
Wildlife Edition (bat-friendly & turtle-friendly lighting)	On request
Lighting scheme	Automatic adaption to sunset and sunrise
Dimming scheme	Seasonal Dynamic Dimming

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