Schréder EKINOX POWERED BY Sunna DESIGN

SE1 KIT

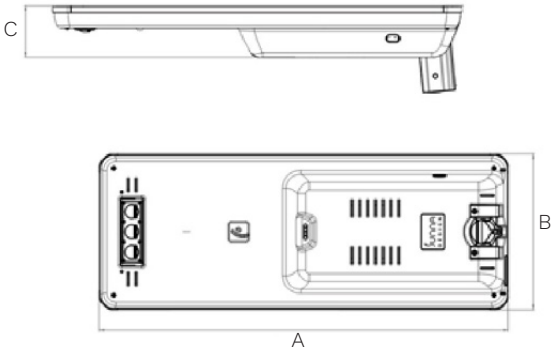
The Schréder EKINOX powered by Sunna Design SE1 kit is an all-in-one turnkey solution designed to make the most of available solar energy for streetlighting. The solar panel, with its battery and LED driver unit, is separated from the luminaire to offer a tilting range from 5° to 50° that enables precise adjustment of the inclination according to the location. It offers the best opportunity of maximising the harvesting of solar radiation to charge the battery and provide lighting throughout the night.

As it is independent of the solar kit, the configuration of the luminaire can be optimised (light distribution and tilt angle) according to the installation height/pole spacing, in order to provide the right light. The luminaire can be equipped with a PIR sensor to raise the lighting level only when people are using the environment and save energy during the rest of the night.

The complete system features a wide range of customisable dimming scenarios combined with intelligent energy management to enhance the battery life cycle and avoid a blackout situation during the night. The system continuously monitors the battery status and, if necessary, can reduce the light intensity to conserve energy throughout the night, even if it means overriding the detection scenario.

KEY ADVANTAGES

- **Compact, easy-to-install, all-in one solar kit (solar panel, battery and LED driver unit)**
- **Tilt adjustments to maximise solar energy harvesting depending on location**
- **Smart battery management: no overload or blackout, enhanced life cycle**
- **Customisable dimming scenarios including optional detection feature (PIR sensor on the luminaire)**
- **Robust mechanical resistance, proven and low-maintenance technologies**
- **Embedded operating status and troubleshooting indicators**



DIMENSIONS AND MOUNTING SE1 KIT	
AxBxC (mm | inch)	1,048x398x132 | 41x16x5
Weight (kg | lbs)	13 | 28.6
Mounting options	Mounting on a Ø60mm pole with an enclosing fixation
Materials	ABS PMMA (100% recycled) + aluminium cover
Aerodynamic resistance (CxS)	0.40m²
Available colours	RAL 9010 Pure white - RAL 8019 Grey brown RAL 9005 Dark black

SOLAR PANEL	
Technology	Photovoltaic modules (monocrystalline silicon)
Structure	Frameless
Dimensions (mm | inch)	1,000x350 | 39x14
Power	50Wp
Electrical characteristics	VOC: 22.89V
	VMPP: 18.54V
	ISC: 2.85A
	IMPP: 2.7A
	36 cells
Tilt settings (steps)	5°, 25°, 50°
Certification	IEC 61215 ; IEC 61730 I and II
Lifetime expectancy	25 years

BATTERY	
Technology	NiMH, maintenance-free, high temperature resistance
Voltage	12V
Capacity	120Wh
Operating temperature	-40°C to +70°C | -40°F to +158°F
Certification	EN 62133
Autonomy	Up to 3 days
Lifetime expectancy	12 years
Number of charge cycles	>3,000 cycles @ 23°C (85% DOD)

ELECTRONICS	
Technology	SunnaCore©
Communication	Bluetooth™
Entry voltage	12V
Open circuit voltage	22.5V
Nominal power	10W
Max. charge/discharge current	5A
Wiring	Marine grade cabling
Electrical protection	Electronic fuse
Tightness level	IP 65 with waterproof connectors
Operating temperature	-20°C to +70°C | -4°F to +158°F
Certification	CE / EN 61000 ; EN 61547 ; EN 55015 ; EN 62493 ; EN 62479 ; EN 300328 ; EN 301489-1
Lifetime expectancy	12 years