



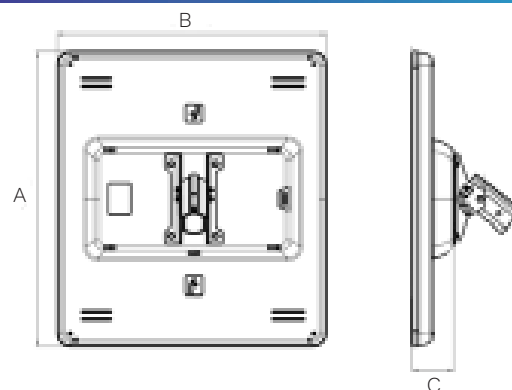
The Schröder EKINOX powered by Sunna Design SE2 kit is an all-in-one turnkey solution designed to make the most of available solar energy for streetlighting. The solar panel, with its battery and LED driver unit, is separated from the luminaire to offer a tilting range from 10° to 50° that enables precise 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 SE2 KIT

| | |
|------------------------------|--|
| AxBxC (mm inch) | 824x753x114 32x30x4 |
| Weight (kg lbs) | 23 50 |
| Mounting options | Mounting on a Ø60mm pole with an enclosing fixation |
| Materials | ABS PMMA (100% recycled) + aluminium cover |
| Aerodynamic resistance (CxS) | 0.62m ² |
| 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) | 776x350 31x14 |
| Power | 80Wp (2x40Wp) |
| Electrical characteristics | VOC: 23.4V |
| | VMPP: 18.72V |
| | ISC: 2.34A |
| | IMPP: 2.14A |
| | 36 cells |
| Tilt settings (steps) | 10°, 25°, 40°, 50° |
| Certification | IEC 61215 ; IEC 61730 I and II |
| Lifetime expectancy | 25 years |

BATTERY

| | |
|-------------------------|---|
| Technology | NiMH, maintenance-free, high temperature resistance |
| Voltage | 24V |
| Capacity | 240Wh |
| 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 | 24V |
| Open circuit voltage | 45V |
| Nominal power | 20W |
| 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 |