

# SKYLITE V3.1

SKL V3.1 Model A or Model B

**TVILIGHT**  
EMPOWERING INTELLIGENCE

SkyLite V3 is a plug-and-play wireless lighting controller for the monitoring and control of the outdoor lighting fixtures. It creates a smart, energy-efficient and safe environment, and serves as an ideal foundation for a Smart City.

SkyLite supports seamless communication with other Tvilight products, such as CitySense Plus and Tvilight Gateway, and can be managed remotely via CityManager.

Remotely programmable lighting schedules allow the users to reduce energy consumption by up to 80% in a safe and comfortable manner. The in-built monitoring tools notify users (via CityManager) about the lighting-related faults such as a lamp or ballast failures. This greatly reduces the need for expensive visual inspections and enables a reduction of operation and maintenance costs.

SkyLite serves as a perfect platform for various Smart City devices and applications (Tvilight or third-party) enabling environmental monitoring, traffic control, asset management, and more.

Designed in the Netherlands  Made in Europe 

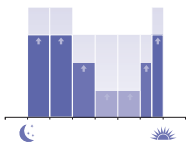
## Features



**Wireless Outdoor Lighting Controller**



**Remote Management & Control via CityManager and 3rd Party Software**



**Advanced Dimming & Adaptive Lighting Schedule**



**Energy monitoring**



**Universal Lamp Compatibility**



**Open Interfaces For Third-party Compatibility (API)**



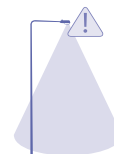
**Automatic Failure and Status Reports via CityManager**



**Inbuilt Astronomical Clock with Backup Battery**



**Plug & Play Installation**



**Fail Proof: 3-Level Back-Up System**

## Benefits



**Up to 80% Energy savings**



**Up to 50% Maintenance cost Reduction**



**Reduce light pollution and CO<sub>2</sub> emissions**



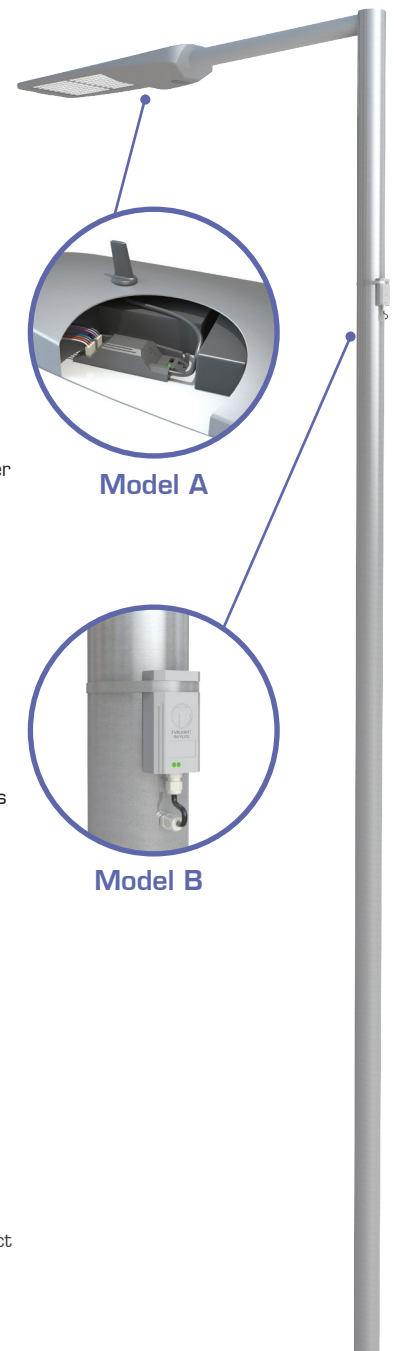
**Wireless platform for Smart City**

# TECHNICAL SPECIFICATIONS

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<b>Product</b>	Wireless communication and lighting control Model A: internally mounted inside light fixture Model B: external mounting with a 5,5m pre-wired power and control cable for ease of installation
<b>Input voltage</b>	230 VAC or 115 VAC, 50/ 60 Hz (depending on variant)
<b>Power consumption</b>	<2W
<b>DALI Loads</b>	Max. 1
<b>Dimming control</b>	1-10 V or DALI
<b>Surge protection</b>	110 Joule (6 kA), 2 kV Combination wave
<b>Controller</b>	ARM Cortex-M3 CPU
<b>Electrical protection</b>	Class II: (overload-short circuit)
<b>Electrical safety</b>	Galvanic isolation between high-voltage and low-voltage terminals
<b>Operating conditions</b>	-20°C to +70°C operating; -40°C to +85°C storage; 20% to 90%, Rh non-condensing
<b>Product mounting</b>	Model A: Inside light fixture, Model B: On the pole
<b>Housing</b>	IP20 (Model A) , IP65 (Model B)
<b>Antenna</b>	Model A: External antenna on outside of light fixture, Model B: Antenna integrated inside product
<b>Dimensions</b>	120mm x 55mm x 29mm (Model A), 160mm x 110mm x 60mm (Model B)
<b>Product compatibility</b>	Compatibility with conventional (PLL, HID, HPS) and LED lights Direct wireless communication with CitySense and Gateway, communication with CityManager: through Gateway



<b>Wireless communication</b>	2.4 GHz IEEE 802.15.4 Self-forming, self-healing wireless network Depending on variant: +9.5 dBm max. transmit power, -96 dBm receiver sensitivity, up to 150 meter open field range or + 22 dBm transmit power, -100 dBm max. receiver sensitivity, up to 1 Km open field range Up to 250 kbps microcontroller RF data rate 32-bit microcontroller, 64 kB Flash and 16 kB RAM
<b>Network security</b>	128 AES Multi-layer security Configuration, software as well as firmware can be updated remotely ensuring up to date network infrastructure.
<b>Over-the-air update</b>	Via Gateway
<b>Server Communication</b>	200:1
<b>Device to Gateway ratio</b>	Via CityManager or similar third-party management software. CityManager enables remote management, monitoring, control, and configuration of lamps on individual and group level.
<b>Remote monitoring</b>	
<b>Safety mode</b>	Auto-safe: in a case of network loss, brightness will go to a pre-defined level depending on the settings. Astro clock based scheduling is still possible.
<b>Certification</b>	CE, CB, ENEC (model A), EN61547, EN55015, EN60950-1, EN61347-2-11, EN 301 489-1/17, EN 300 328, RoHS. RF transceiver compliant with US (FCC), Canadian (IC), European (ETSI), and Japanese (Telec) standards.
<b>Manufacturing</b>	ISO 9001:2008, Made in Europe

<b>AstroClock</b>	Battery backed real-time clock: Astro-clock feature Able to switch on/off the lamps at sunset/sunrise and adjust them seasonally (summer-winter time). Eliminates the need for conventional photocell
<b>Warranty</b>	Standard 2 years limited warranty. Extended warranty available. Warranty subject to proper use of installation- and application manuals.
<b>Application</b>	Outdoor street lighting, Area lighting

Keywords: Wireless SLC, OLC RF (Street / Outdoor Lighting Controller Radio Frequency)