

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



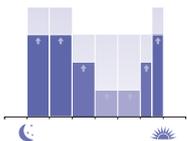
Open Interfaces For Third-party Compatibility (API)



Remote Management & Control via CityManager and 3rd Party Software



Automatic Failure and Status Reports via CityManager



Advanced Dimming & Adaptive Lighting Schedule



Inbuilt Astronomical Clock with Backup Battery



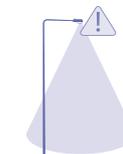
Energy monitoring



Plug & Play Installation



Universal Lamp Compatibility



Fail Proof: 3-Level Back-Up System

Benefits



Up to 80%
Energy savings



Up to 50%
Maintenance
cost Reduction



Reduce light
pollution and
CO₂ emissions



Wireless
platform for
Smart City

TECHNICAL SPECIFICATIONS

SKL V3.1 Model A or Model B

TVILIGHT
EMPOWERING INTELLIGENCE

Product	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
Input voltage	230 VAC or 115 VAC, 50/ 60 Hz (depending on variant)
Power consumption	<2W
DALI Loads	Max.1
Dimming control	0-10 V or DALI
Surge protection	110 Joule (6 kA), 2 kV Combination wave
Controller	ARM Cortex-M3 CPU
Electrical protection	Class II: (overload-short circuit)
Electrical safety	Galvanic isolation between high-voltage and low-voltage terminals
Operating conditions	-20°C to +70°C operating; -40°C to +85°C storage; 20% to 90%, Rh non-condensing
Product mounting	Model A: Inside light fixture, Model B: On the pole
Housing	IP20 (Model A) , IP65 (Model B)
Antenna	Model A: External antenna on outside of light fixture, Model B: Antenna integrated inside product
Dimensions	120mm x 55mm x 29mm (Model A), 160mm x 110mm x 60mm (Model B)
Product compatibility	Compatibility with conventional (PLL, HID, HPS) and LED lights Direct wireless communication with CitySense and Gateway, communication with CityManager: through Gateway



Wireless communication	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
Network security	128 AES Multi-layer security Configuration, software as well as firmware can be updated remotely
Over-the-air update	ensuring up to date network infrastructure.
Server Communication	Via Gateway
Device to Gateway ratio	200:1
Remote monitoring	Via CityManager or similar third-party management software. CityManager enables remote management, monitoring, control, and configuration of lamps on individual and group level.
Safety mode	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.
Certification	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.
Manufacturing	ISO 9001:2008, Made in Europe

AstroClock	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
Warranty	Standard 2 years limited warranty. Extended warranty available. Warranty subject to proper use of installation- and application manuals.
Application	Outdoor street lighting, Area lighting