

Nexgrid® Technology Solutions



ecoSwitch SL Streetlight Relay and Monitoring

Nexgrid’s ecoSwitch SL is a ZigBee based wireless streetlight controller that enables remote management of streetlight functions through Nexgrid’s ecoOne® software system.

The ecoSwitch SL houses a 30 amp relay for direct control of streetlights within a Utility’s power grid. The ecoSwitch SL is configured with the ability to control streetlight on/off

functions with a number of scheduling options that include light sensor and time based schedules defined by the customer. In addition, the ecoSwitch SL has the capability to monitor light bulb status, power consumption, and current sensing for bulb outage and status. This powerful feature allows for detailed load study functions and more specific scheduling capabilities to better manage energy usage of streetlights.

Nexgrid’s ecoSwitch SL utilizes an IEEE standards-based communication technology (ZigBee 802.15.4). The ecoSwitch SL communicates seamlessly into a sophisticated MESH communication technology that provides ubiquitous coverage throughout the network at a low cost. In addition, the ecoSwitch SL communicates with third party devices to create a platform for Demand Side Management and other Utility assets that require communication. Nexgrid’s ecoSwitch SL ensures greater reliability and redundancy on a future-proof broadband network that is easily deployed and managed.

The ecoSwitch SL provides the same streetlight monitoring features found in the ecoNet SL and communicates with other ZigBee enabled devices on the network.

Technical Specifications

Nexgrid Part Number	ecoSwitch SL
Interface	ZigBee Wireless (IEEE 802.15.4 compliant)
Input Power	120 – 240 V 50-60 Hz
Signal Rate	240 kbps
Power Consumption	0.3 Watts/ 2.9 VA @ 240VAC
Mechanical Dimensions	2.5" W x 1.75" H x 1.1"D
Weight	.12 Kg
Ambient Light	5-45 Lux
Temperature	-20 C to +70 C
Humidity	0% - 95%
Complies with Standards	FCC Part 15, ANSI C136.10
Encryption	Standard AES /DES Capable
Frequency	2.4 GHz to 2.48 GHz, 16-MHz channels
RX Sensitivity	-95 dBm nominal
TX Power	-32 dbm to +20 dbm (100mW)

KEY FEATURES

- ZigBee Communication
- Distributed Intelligence Control
- Time-Based Control
- Multi Schedule Support
- Light Bulb Status Monitoring
- Current Sensing for Bulb Outage
- Power Consumption Monitoring
- ANSI C136.10 NEMA Twist Lock

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