

# Smart Community Solutions Pollution Sensing



## Cost Effective City-Wide Pollution Mapping and Profiling

Landis+Gyr's Smart Community Solutions Pollution Sensing enables utilities to implement a low-cost pollution sensing solution with built-in networking and utilities grid connection. By powering the sensor via the controller, the added cost for pollution sensing is extremely low. The sensors offered have been selected based on the high variability encountered across a city environment, depending on factors such as traffic and localized pollution sources, allowing for the collection and measurement of a wide variety of air quality pollutants. The data is collected and reported daily via the Smart Community Center, and available via the platform's visualization tools. Mapping and profiling city-wide pollution has never been so cost effective to deploy – or maintain. With Landis+Gyr's Tool-less Sensor Platform, large numbers of pollution sensors can be upgraded in a single-day maintenance cycle.

### ENHANCED SAFETY FEATURES

- Identify problem pollution sources/areas to develop mitigation strategies, minimize air quality impact
- Inform public health warnings regarding pollution levels that may affect at-risk populations

### IMPROVED OPERATIONAL & ENERGY EFFICIENCIES

- Sensors added quickly and cost-effectively to Landis+Gyr's Tool-less Sensor Platform
- Sensor allows for collection of data on CO<sub>2</sub>, O<sub>3</sub>, O<sub>2</sub>, NO<sub>x</sub> and other air quality pollutants
- Data collected, reported based on peak value by pollutant within 15 minute logging increments
- Data available via visualization tools within the Smart Community Center

### COMPONENTS

- Landis+Gyr street light controller with integrated Network Node
- Command Center 7.1 MR3 or later
- Smart Community Center Software



ENHANCED SAFETY  
FEATURES



IMPROVED  
OPERATIONAL &  
ENERGY EFFICIENCIES



COMPONENTS

# Street Light Management



ENHANCED  
SAFETY  
FEATURES



IMPROVED  
OPERATIONAL  
& ENERGY  
EFFICIENCIES



COMPONENTS

## PRODUCT SPECIFICATIONS

FCC Class B Device

CONTROLLER SPECS	
Dimensions of Controller	Diameter 3.5" (88mm), Height 3.6" (92mm)
Voltage	120-277V (50-60 Hz)
Material	Lexan™ SLX Polycarbonate
Ingress Protection	IP67, IP66
Temperature Rating	Operational -40°C to 60°C Storage -40°C to 85°C
Compatibility (General)	LED, HPS, and induction to a max load of 6A
Compatibility (Luminaire with ANSI C136.41 standard receptacle)	All Features supported by LED luminaires with 5 and 7 pin All features except dimming is supported on 3 pin HPS luminaires
Dimming Method	Complies with 0-10V DC (IEC60929) and DALI (IEC62386)
Dimming Ramping Process	Dimming in gradual steps every 6 seconds (e.g. 100% to 20% = 102 seconds)
Dimming Schedule	Daily or weekly recurring schedule with ability to schedule a special event, in 1 minute increments with 1% resolutions
On / Off Trigger	Photo sensor for local light detection (selectable) with GPS based astronomical dawn/dusk back up
Dawn / Dusk Levels	On: 2.5 foot candles (fc) Off: 3.9 foot candles (fc) Configurable over the air

RADIO SPECS	
Frequency Range	902 to 928 MHz
Supported Data Rates	RF Mesh (N500): 9.6, 19.2, 38.4, 115.2 kbps RF Mesh IP (N550): 50, 150, 200 kbps
Output Power	High Min: 25, Typical: 26, Max: 27 dBm
Receiver Sensitivity	9.6 kbps Min: -114, Typical: -112, Max: -110 dBm 19.2 kbps Min: -112, Typical: -110, Max: -108 dBm 38.4 kbps Min: -110, Typical: -108, Max: -106 dBm 115.2 kbps Min: -102, Typical: -100, Max: -98 dBm 50 kbps Min: -107, Typical: -105, Max: -103 dBm 150 kbps Min: -99, Typical: -97, Max: -95 dBm 200 kbps Min: -98, Typical: -96, Max: -94 dBm

This information is provided on an "as is" basis and does not imply any kind of guarantee or warranty, express or implied. Changes may be made to this information.

### GET IN TOUCH

For more information and nationwide warranty terms, visit us at [LandisGyr.com](http://LandisGyr.com) or call at 678-258-1500.



### LET'S BUILD A BRIGHTER FUTURE TOGETHER

Since 1896, Landis+Gyr has been a global leader of energy management solutions. We've provided more than 3,500 utility companies all over the world with the broadest portfolio of products and services in the industry. With a worldwide team of 1,300+ engineers and research professionals, as well as an ISO certification for quality and environmental processes, we are committed to improving energy efficiency, streamlining operations, and improving customer service for utility providers.

LandisGyr.com

© 2019 Landis+Gyr | 9.19