



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 is 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 and Energy Efficiencies

- Sensors added quickly and cost-effectively to Landis+Gyr's Tool-less Sensor Platform
- Sensor allows for collection of data on CO₂, O₃, O₂, NO_x 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

Street Light Management

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	<ul style="list-style-type: none">Operational -40°C to 60°CStorage -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)	<ul style="list-style-type: none">All Features supported by LED luminaires with 5 and 7 pinAll 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	<ul style="list-style-type: none">9.6 kbps Min: -114, Typical: -112, Max: -110 dBm19.2 kbps Min: -112, Typical: -110, Max: -108 dBm38.4 kbps Min: -110, Typical: -108, Max: -106 dBm115.2 kbps Min: -102, Typical: -100, Max: -98 dBm50 kbps Min: -107, Typical: -105, Max: -103 dBm150 kbps Min: -99, Typical: -97, Max: -95 dBm200 kbps Min: -98, Typical: -96, Max: -94 dBm

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Let's build a brighter future together.

Landis+Gyr is a leading global provider of integrated energy management solutions. We measure and analyze energy utilization to generate empowering analytics for smart grid and infrastructure management, enabling utilities and consumers to reduce energy consumption. Our innovative and proven portfolio of software, services and intelligent sensor technology is a key driver to decarbonize the grid. Having enabled 9 million tons of CO₂ savings in FY 2024 through our product offerings, Landis+Gyr manages energy better – since 1896. With sales of USD 1.7 billion in FY 2024, Landis+Gyr employs around 6,300 talented people across five continents. For more information, please visit our website www.landisgyr.com.