



## Smart Community Solutions

# Acoustic Monitoring

## Inform noise management and mitigation strategies with acoustic monitoring and profiling

Landis+Gyr's Smart Community Solutions Acoustic Monitoring enables utilities to implement a low-cost acoustic profiling system across their communities. Landis+Gyr's dual-microphone acoustic detection sensors, mounted atop street lights, listen for noise events that exceed approved municipal thresholds. When a threshold is exceeded, the system uses the back-haul from the lighting network to report the event. Event log data is then available through the data visualization components of Landis+Gyr's Smart Community Center. This enables utilities to independently identify problem areas, and profile patterns of behavior to inform strategies of mitigation. The system can be used to monitor the impact of construction, outdoor concerts, etc. The data can also be used in gunshot detection programs.

### Enhanced Safety Features

- Identify acoustic problem areas to develop mitigation strategies, minimizing public impact
- Provide data to gunshot detection and emergency notification programs

### Improved Operational and Energy Efficiencies

- Sensors mounted on street lights, use back-haul from lighting network to report event logs
- Event log data available through data visualization component of 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"><li>Operational -40°C to 60°C</li><li>Storage -40°C to 85°C</li></ul>
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"><li>All Features supported by LED luminaires with 5 and 7 pin</li><li>All features except dimming is supported on 3 pin HPS luminaires</li></ul>
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"><li>9.6 kbps Min: -114, Typical: -112, Max: -110 dBm</li><li>19.2 kbps Min: -112, Typical: -110, Max: -108 dBm</li><li>38.4 kbps Min: -110, Typical: -108, Max: -106 dBm</li><li>115.2 kbps Min: -102, Typical: -100, Max: -98 dBm</li><li>50 kbps Min: -107, Typical: -105, Max: -103 dBm</li><li>150 kbps Min: -99, Typical: -97, Max: -95 dBm</li><li>200 kbps Min: -98, Typical: -96, Max: -94 dBm</li></ul>

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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 CO<sub>2</sub> 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](http://www.landisgyr.com).