SLiQ

Liveable Cities

STREETLIGHT (SL) INTELLIGENCE (iQ)

LED Streetlight + Data Acquisition Platform (DAP)

Streetlight Intelligence (SLiQ) is the jump-start to your smart city. SLiQ is a new state of the art LED luminaire, integrating high-end lighting capabilities with the latest adaptive lighting controls and sensing capabilities in one system. SLiQ provides out of the box performance in four configurations to match every project's needs: Basic (B), Controls (C), Toolless Sensor Connector (T), and Data (D) series.

SLiQ provides a wide variety of light distributions. The 20+ optical distributions available ensure optimal coverage of light and visibility on the road. SLiQ is also designed with flat glass to reduce light depreciation from dust and grime build up.

SLiQ's unique integrated controls increases reliability and has a lower optimized cost. External electrical and mechanical connectors are eliminated with integrated controls. The part count is reduced and also the amount of failure points. All connections are sealed in a single IP-66 chamber. Environmental exposure from traditional top mounted controllers is no longer an issue.

Choosing SLiQ avoids the pitfalls of many controls projects, which suffer from incorrect data capture in the field by contractors. With controls and luminaire contained in one unit SLiQ's installation is a painless, plug and play design. Luminaire data is also programmed into the controller at the time of manufacture.

SLiQ is ideal for roadway/street lighting, parking areas, bridges, and general outdoor area lighting applications where networked controls and advanced sensors are deployed.

Outdoor Technical Resin - Makrolon 9415

German engineered Technical Resin developed by Bayer MaterialScience.

• Glass fiber reinforced material specifically designed to combat UV.

• Adds stiffness and strength by bonding glass fibers to resin (similar to use of fiberglass in boats).

• No paint loss over time (e.g. peeling, bubbling potential in painted surfaces).

• 130°C / 266°F ambient tested

• UL-F1 UV Rated for outdoor use

• IK 10 Tested

• Radio frequency (RF) friendly
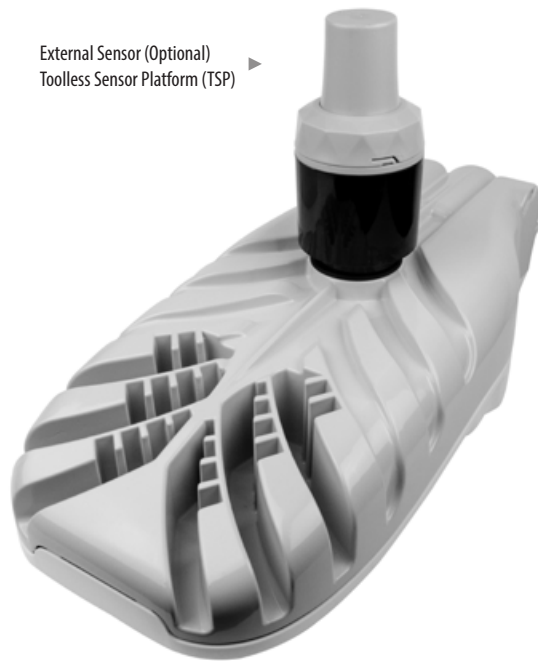
| Solid (No Receptacle) | 7-Pin NEMA Receptacle | ZHAGA Receptacle | Toolless Sensor Connector |

External Sensor (Optional)
Toolless Sensor Platform (TSP) ▶

▲

- Aggressive heat sinks optimize long term LED performance over time
- Only premium aluminum alloys (less than 0.6% copper content) are utilized in order to decrease susceptibility to long term corrosion.
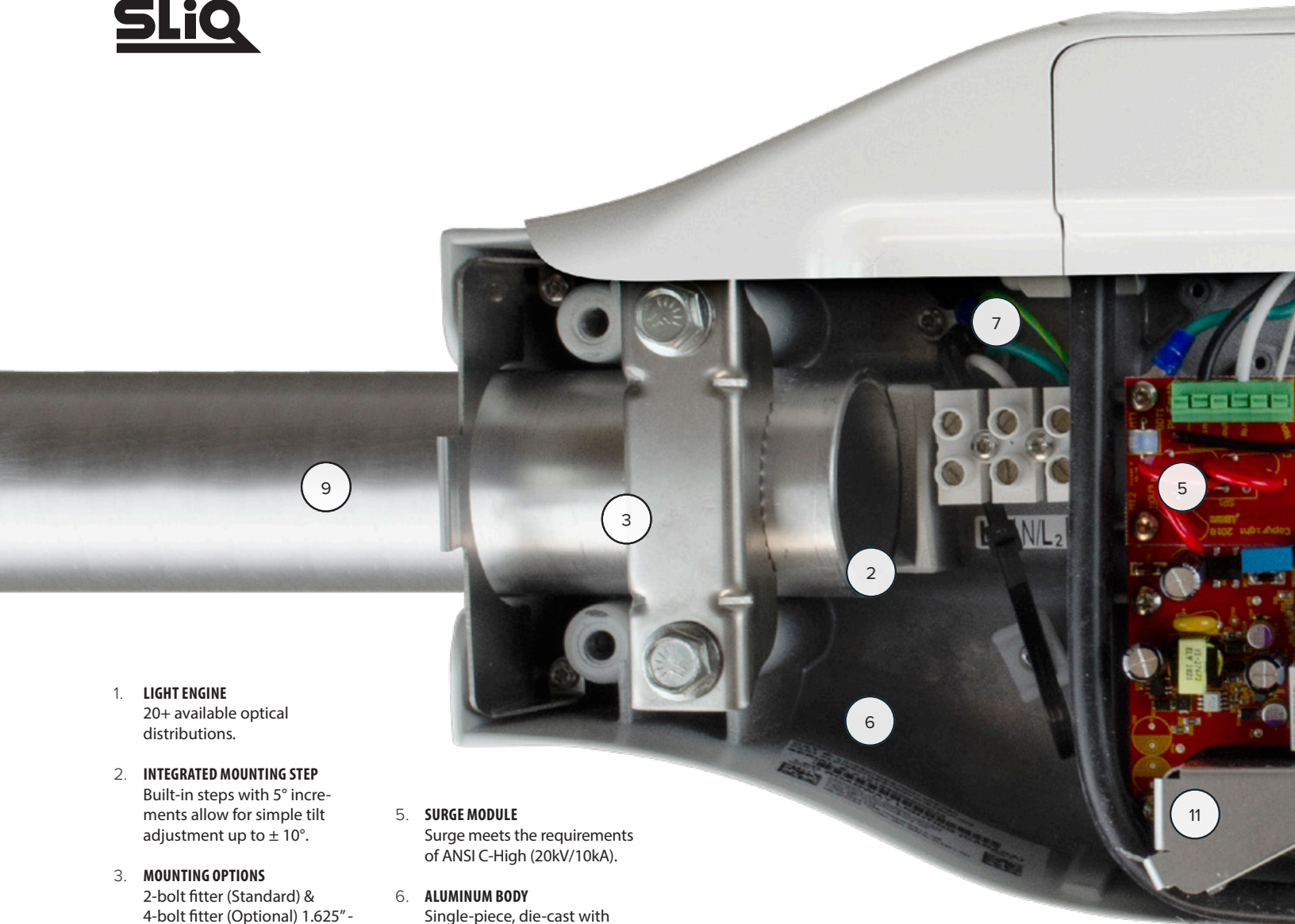
	SERIES			
	B	C	T	D
0-10V or DALI	✓	✓	✓	✓
Flat Glass	✓	✓	✓	✓
20+ Light Distributions	✓	✓	✓	✓
+/- 10 degrees tilt standard	✓	✓	✓	✓
Vertical/Horizontal Mount option	✓	✓	✓	✓
Top - Solid/NEMA/ZHAGA	✓	✓	✓	✓
Bottom - Solid/NEMA/ZHAGA	✓	✓		✓
Internal Wireless Controls		✓	✓	✓
1% energy measurement		✓	✓	✓
Paired Single Asset ID in CMS		✓	✓	✓
Power Based Dimming		✓	✓	✓
Internal Ambient Light Sensing		✓	✓	✓
Internal GPS asset locating		✓	✓	✓
Tool-Less Sensor Platform Connector			✓	
Internal Safe Streets Speed Monitor				✓
Internal Traffic Flow Monitoring				✓
Internal Traffic Volume Characterization				✓
Internal Targeted Enforcement Analytics				✓
Motion/Presence Based Lighting*				✓

* Presence based lighting currently only available on LRL Mesh Network, and not all data sets will be available for traffic analysis.

Internal Sensor (Optional)
Data Acquisition Platform (DAP)

◀ • 16 LEDS
  • A wide range of drive currents
  • 4000K (Standard), 3000K, & 5000K (Optional) CCT

SLiQ

1. **LIGHT ENGINE**
   20+ available optical distributions.

2. **INTEGRATED MOUNTING STEP**
   Built-in steps with 5° increments allow for simple tilt adjustment up to ± 10°.

3. **MOUNTING OPTIONS**
   2-bolt fitter (Standard) & 4-bolt fitter (Optional) 1.625" - 2.375" (42 - 60 mm) O.D. Tenons. Vertical and horizontal mount option.

4. **DURABLE FINISH**
   Polyester powder-coat topcoat available in grey, bronze, or black.

5. **SURGE MODULE**
   Surge meets the requirements of ANSI C-High (20kV/10kA).

6. **ALUMINUM BODY**
   Single-piece, die-cast with premium aluminum alloy.

7. **GASKET/SEAL**
   IP66 rated protection against water and dust particles.

8. **GLASS LENS**
   IK09 rated flat glass (standard).

9. **QUICK ACCESS LATCH**
   Tool-less entry.

10. **INTEGRATED CONTROLS**
    SmartLinx built in controls provide adaptive lighting and networked controls.

11. **RADAR SENSING - DATA ACQUISITION**
    Radar sensing option is available for the SLiQ.

12. **OUTDOOR TECHNICAL RESIN**

SMARTLINX

SmartLinx Central Management System (CMS) is a web-based portal and interface which gives you control of your street lighting assets and sensors. Our CMS software consists of many powerful and useful tools to reduce energy costs by an additional 10 - 25% (on average). SmartLinx is currently in use by municipalities and utilities around the globe.

SmartLinx CMS is a powerful ▶ central management system with lots of useful tools, all tied together with a modern and responsive user interface.

Included features:
• Scheduling
• Energy reporting
• Failure monitoring
• Asset tracking
• Traffic counting
• Speed reporting
• Presence based lighting
• On-demand lighting control
• Heat/trend mapping
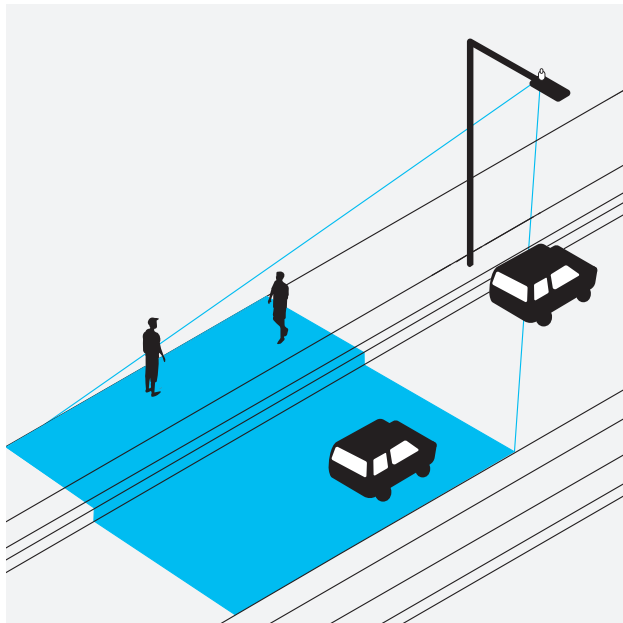• Flexible API integration

Multi-Application Data Acquisition Platform (DAP) Traffic Sensor

1. SPEED MAPPING
Continuous speed mapping of your city.

- Eliminate the need to roll assets to collect speed data
- Create data based public safety initiatives
- Generate reports for Councilors for neighborhood complaints

2. TRAFFIC FLOW ANALYSIS
Provides 24/7 measurement of traffic flow/speed.

- Track traffic flow by 85th percentile accuracy
- Long-term traffic trend analysis
- Create custom alerts for real time notifications
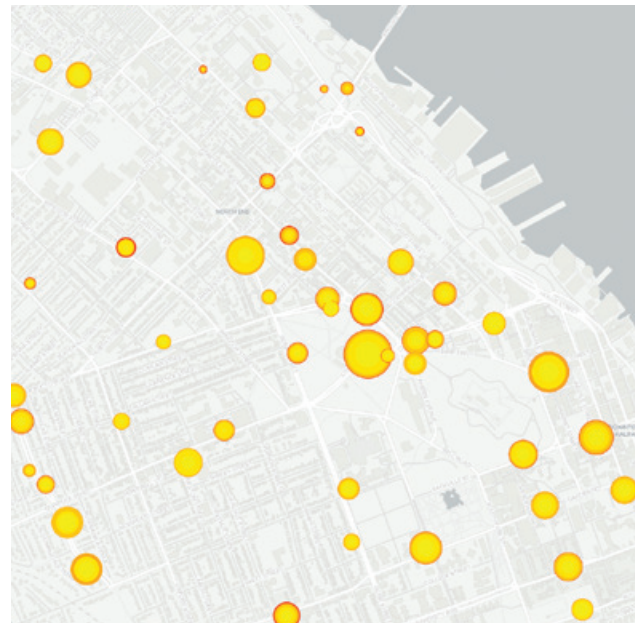
3. TRAFFIC COUNTING
Dramatically reduce the cost of fixed position traffic counting.

- On-demand traffic study data
- Long-term traffic trend analysis for road maintenance planning
- Adaptive lighting planning/scheduling based on in-field traffic measurements

Presence Based Lighting

HOW IT WORKS

Presence based detectors are placed on every street light, utilizing our Data Acquisition Platform (DAP).

Lighting is operated at lower output (e.g. 30% output), and when presence of a person or vehicle is detected, the lighting at the detecting light, as well as its neighbors within broadcast range of the radio, is raised to the target level of output (i.e. 100%). Lighting always at approved light levels.
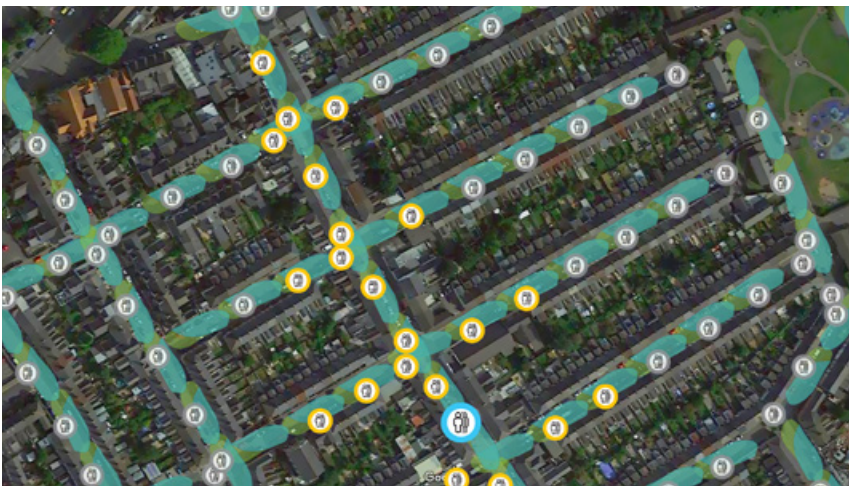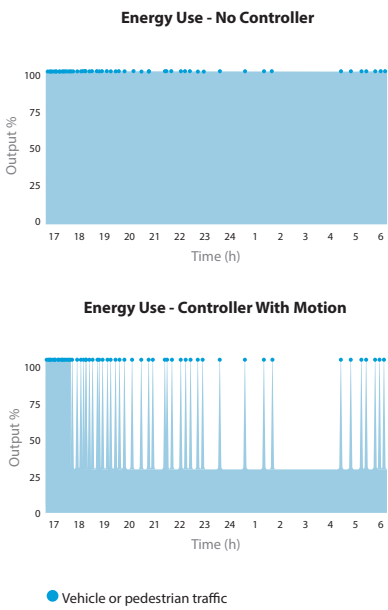
With motion sensors on every light, and communication range of 7 – 12 poles in each direction, there are a plethora of detection redundancies built into the system to ensure vehicles and pedestrians are operating under safe lighting conditions.

BENEFITS TO CONSUMER

Energy Savings: Presence based lighting can save customers an additional 40-60% in energy savings. The on board energy measurement system is revenue grade and complies with ANSI C136.50.

Asset Life Extension: LED and LED driver life are greatly impacted by temperature during operation of the device. Operating the system in a pre-motion state allows the LEDs and drivers to operate cooler, thereby extending the life of the asset.

No Compromise: Have levels always at their designed light levels to reduce risks.

Energy Use - No Controller

Energy Use - Controller With Motion

● Vehicle or pedestrian traffic

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www.liveablecities.com