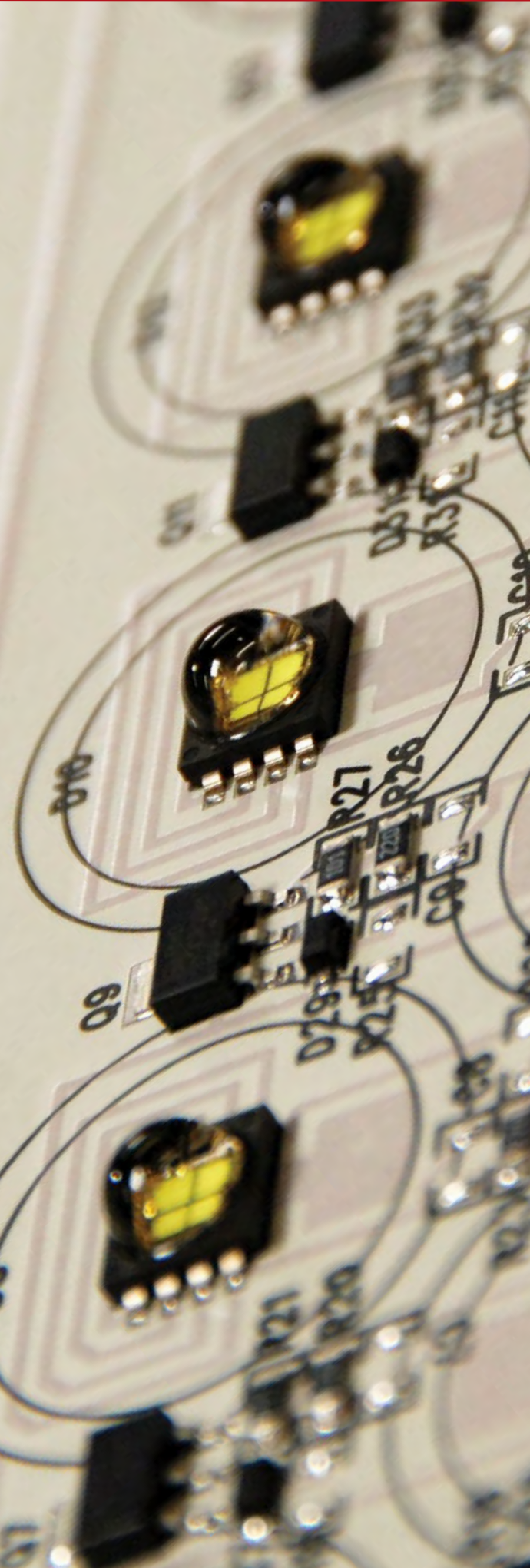




Advanced Wireless Control and Monitoring for LED Lighting





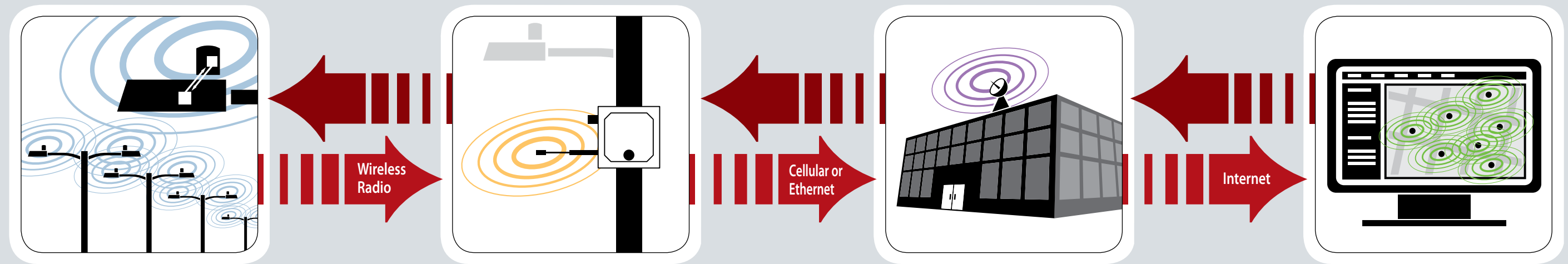
ROAM wireless controls complete your LED investment

As the LED lighting revolution begins to unfold, lighting managers and endusers are investing in outdoor LED lighting with the promise of reduced operating costs.

Lighting manufacturers and industry experts agree: to maximize the Return on Investment (ROI), driven by reduced maintenance and energy costs, LED lighting must be properly controlled and managed.

ROAM wireless controls *complete* your LED investment by providing the intelligent control and feedback necessary to successfully manage your outdoor LED fixtures.

***Maximize energy savings
and reduce system
operating costs.***



Smart Photocontrols — Embedded Dimming Modules

Diagnostic photocontrol with wireless radio (one per fixture)

On Board Dimming Control Module

ROAM starts with a Mesh Network of Smart Photocontrols. In addition to standard photocontrol, nodes can also receive control instructions such as “dim to 65% at midnight and return to 100% light output at 4:00 a.m.” The node in turn transmits these commands wirelessly to the dimming module internal to the fixture. The nodes continuously monitor and collect fixture performance data and unusual operating conditions.

- Universal: works with any manufacturers’ outdoor LED lighting fixture
- Powerful transmitters allow nodes to be spaced far (up to 1,000 ft.) apart
- Increased surge protection for durability and long life

Gateway

Smart photocontrol collection device (one gateway per 2,000 nodes)

Nodes transmit performance data to and receive commands from the Gateway.

- Industry leading Node-to-Gateway ratio lowers equipment and installation costs
- Flexible uplink options using Cellular, Ethernet or Wi-Fi
- Flexible outdoor mounting options (pole or building)

Network Operation Center

Centralized Data Collection and Management

Fixture performance data is transmitted from the Gateways and stored at the U.S.-based Network Operations Center.

- Our secure web servers analyze and store the fixture data
- Highest encryption available for civilian applications
- Requires no customer-hosted hardware, software or IT Support

Customer Portal

Secure, web-based user interface

The web-based Customer Portal displays all of the system operating conditions and performance data by map or dashboard-based views. Scheduling and reports are all available on the Customer Portal.

- Map or Dashboard-based Graphic User Interface
- Control and Schedule ON/OFF/TRIM/DIM for individual fixtures or groups of fixtures
- Exception-based reporting quickly highlights fixture malfunctions operating characteristics for each LED fixture



Maximize Your ROI

ROAM's state-of-the-art adaptive* controls provide the flexibility necessary to optimize energy use and extend fixture life.

- Customer Defined Continuous Dimming
- Adjust On/Off times and night trimming schedules
- Prevention of Day Burning LED Fixtures

Validate Fixture Performance

ROAM provides daily performance feedback on every fixture in the network, so you can easily compare field performance from various manufacturers.

- Track Burn Hours to verify LED fixture life
- Monitor the Energy Consumption and Savings at each fixture (kWh Reporting)
- Benchmark manufacturer performance

Protect Your LED Investment

By remotely monitoring each LED fixture, you can protect your lighting system from the issues that lead to premature failure.

- Detect LED fixture malfunctions remotely
- Avoid day burning fixtures and prevent premature failure
- Locate and repair voltage and over-current fluctuations

* Adaptive controls continuously optimize fixture performance based on changes in environmental conditions and/or customer-specified requirements.

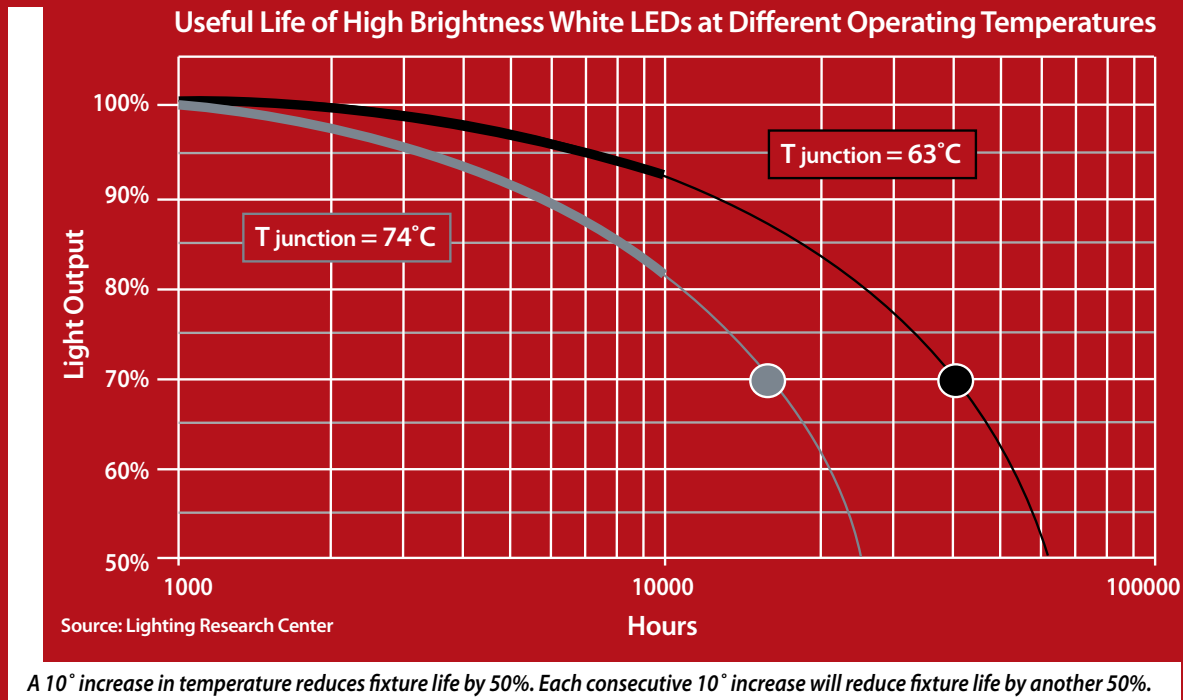


*Wirelessly control
LED fixtures while
monitoring and
measuring
performance.*



Prevent Premature Fixture Failure

LED lighting generates a significant amount of heat which must be dissipated to keep the fixture healthy.



Thermal build-up, exacerbated by the intense heat generated by sunlight, can potentially reduce fixture life from years to months!

Some outdoor LED lighting manufacturers' warranties exclude failure caused by "day burning" and ROAM is the most reliable and cost effective method for remotely identifying 100% of your day burning LED fixtures. With ROAM, you no longer need to rely on angry customers and citizens to locate malfunctioning fixtures!

The ROAM system remotely automatically detects day burning LED fixtures and issues service-alerts to the Customer Portal. This enables you to immediately send a repair crew to any malfunctioning fixture, and protect your LED lighting investment. As an added precaution, ROAM-enabled fixtures automatically go into a "protection mode" and will shut-off or dim the LED fixture during the day.

As North America's largest lighting manufacturer, Acuity Brands brings together the industry's most innovative lighting and control brands to offer the right light for every application. Acuity Brands Controls—consisting of ROAM, Dark To Light, Lighting Control & Design (LC&D), Sensor Switch and Synergy Lighting Controls—provides innovative control solutions for customers demanding efficiency, flexibility, quality and excellent service.

