# **lumenpulse**<sup>™</sup> **Leading the Way**Bridges + Infrastructure





### Getting You There

Our end-to-end design ownership means our luminaires work in unison, across product families, so landscape designers, lighting designers, architects, and city planners can create a consistent aesthetic across multiple applications. Read on to learn of all the ways Lumenpulse is committed to lighting bridges and infrastructure.

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Cover Image
Veterans' Glass City Skyway
Toledo, Ohio, United States
Lighting Design: Horton Lees Brogden
Photographer: Feinknopf Photography

Denver Airport Transit Center Denver, Colorado, United States Lighting Design: SNAIK Atelier Yann Kersalé Light Art Photographer: Ryan Linton



### Lumenpulse Headquarters

Longueuil, Quebec, Canada Architect: Lemay Photographer: Stéphane Brügger

### Seeing to Tomorrow

Founded in 2006 in Montreal, Canada, our people proudly design, manufacture, and promote lighting solutions. We focus on the intersection of market needs and innovate accordingly using research and technology. Our products and systems always deliver peace of mind and exceed the expectations of both our customers and shareholders. Lumenpulse's vision is to empower the specification lighting community with differentiated solutions that transform lighting challenges into simple, innovative, architectural masterpieces.

Our vision is the foundation of our expertise in illuminating bridges and infrastructure. Our decades of earned industrial and technological knowledge, proven by multiple bridge and infrastructure projects the world over, has given us a reputation for luminaires that are adaptable to numerous applications, have outstanding lifetimes, and an unmatched quality of light.



Two Rivers Park Bridge Little Rock, Arkansas, United States Engineer: Garver LLC Photographer: Mike Anderson

### A Source of Pride

The design and manufacturing of highly dependable outdoor luminaires is a distinguished and vital endeavor. The architectural and decorative lighting of bridges and infrastructure not only increases their visibility, accessibility, and functionality; it creates civic pride.

Lumenpulse has long been committed to researching, developing, and implementing technologies to make this world a brighter, more energy-efficient place. Bridges and infrastructure are essential spaces that need not be merely functional; they can inspire, excite, and move us. It is for these reasons that we at Lumenpulse take great pride in our outdoor luminaires.

#### Port of Montreal's Grand Quai and Cruise Terminal

Montreal, Quebec, Canada Architects: Provencher\_Roy Photographer: Stéphane Brügger

### The Road to Success

Creating luminaires that successfully weather the elements while maintaining an excellent quality of light is what we do. Our family approach to lighting design means all of our product families can be used in unison across several applications while maintaining a unified aesthetic. Our products are control agnostic, which means you take control, and anything is possible.

### Sustainable Design

Sustainable industrial design that allows for wearable parts to be replaced. All products are backed by a 5-year warranty.

### Family Approach

Scalable families of products that ensure visual consistency across applications.

### Quality of Light

Sources that offer outstanding longevity, a consistent color temperature over time, and best-in-class performance.

### Control Ready

Innovative control technologies that are control agnostic and work with standard control protocols.

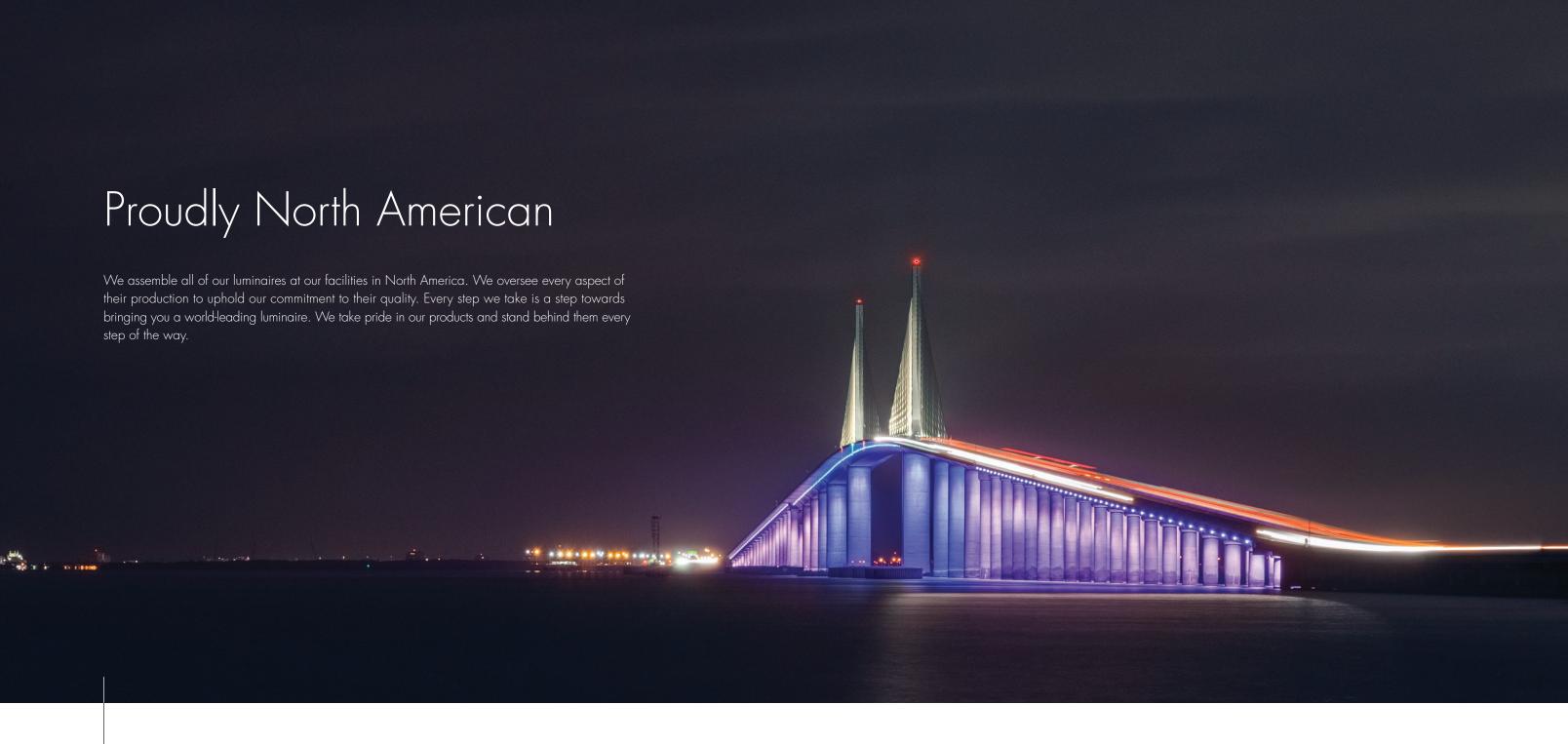
### **Dynamic Solutions**

A variety of optics, colors, accessories, and finishes, promoting greater adaptability and freedom.

### Ease of Installation

Designed with a fluid compatibility and numerous mounting options that save time and money.





### Bob Graham Sunshine Skyway Bridge

St-Petersburg, Florida, United States Engineer: T.Y. Lin International Photographer: Feinknopf Photography



### Need Products Made in the USA?

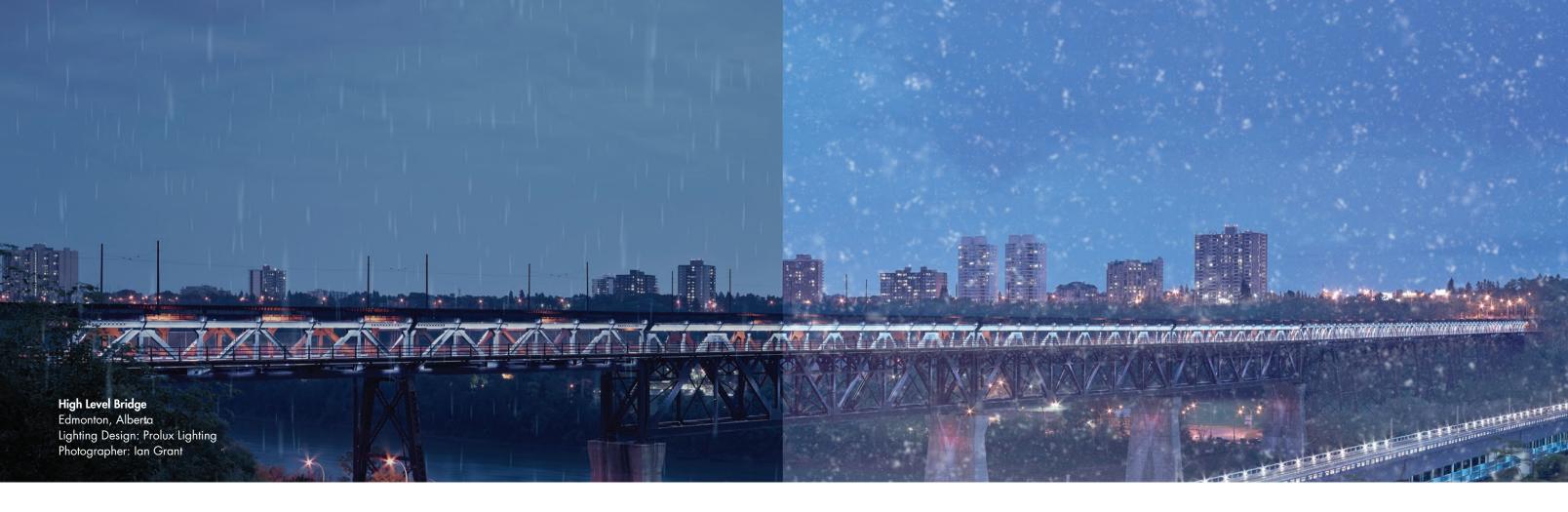
For projects that require US-built products, we offer a number of products proudly made in our US facility that meet or exceed Buy America, Buy American, and Infrastructure Investment and Jobs Act regulations and laws.

To learn more, visit: lumenpulse.com/buy-america-n

### We Build to Last

We design, test, and manufacture our luminaires to brave the elements. We guarantee them to stand tall during harsh conditions, be it the relentless vibration of a bridge or years of sea spray, they will endure. Our commitment to low-maintenance, long lifespan luminaires for extreme outdoor use is unfailing.







### Weather or Not

Your infrastructure has been engineered to handle whatever weather is thrown at it. So are our luminaires. To ensure their dependability, our IP66-rated fixtures are sealed and tested at our facility.



### To the Nth Degree

We've put our luminaires to the test, given them the Nth degree so they can handle any fluctuation of degrees. With operating temperatures of -25 °C to 50 °C (-13 °F to 122 °F) the weather is irrelevant.



### Good Vibrations

Structural vibration is not something you need to worry about, we offer a choice of luminaires that meet vibration standards for bridge applications.



### Corrosion Resistant

Seaspray, chemicals, the extreme outdoors, you name it, and our luminaires resist it. Being ready for hostile environments is par for the course when it comes to a long life with low maintenance outdoors.

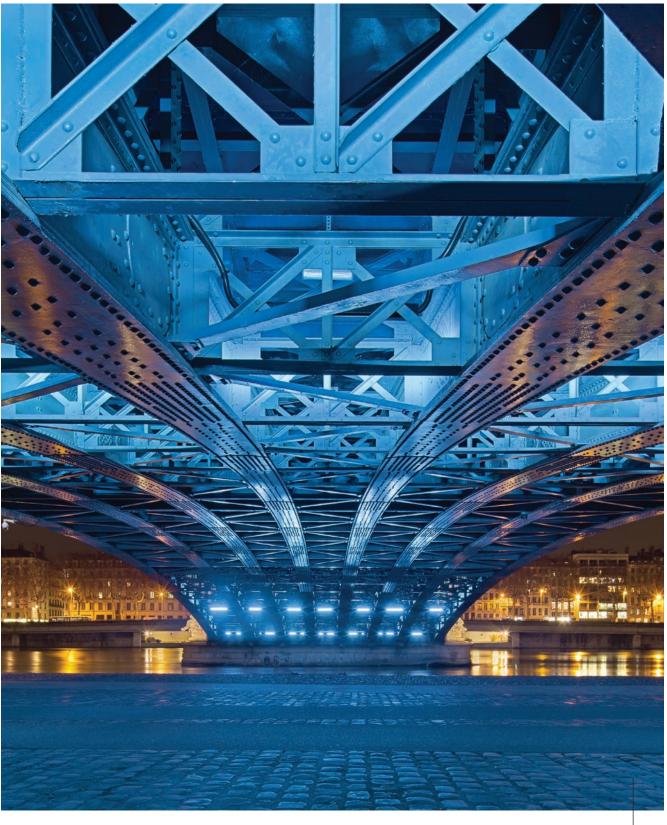


### Live Long and Prosper

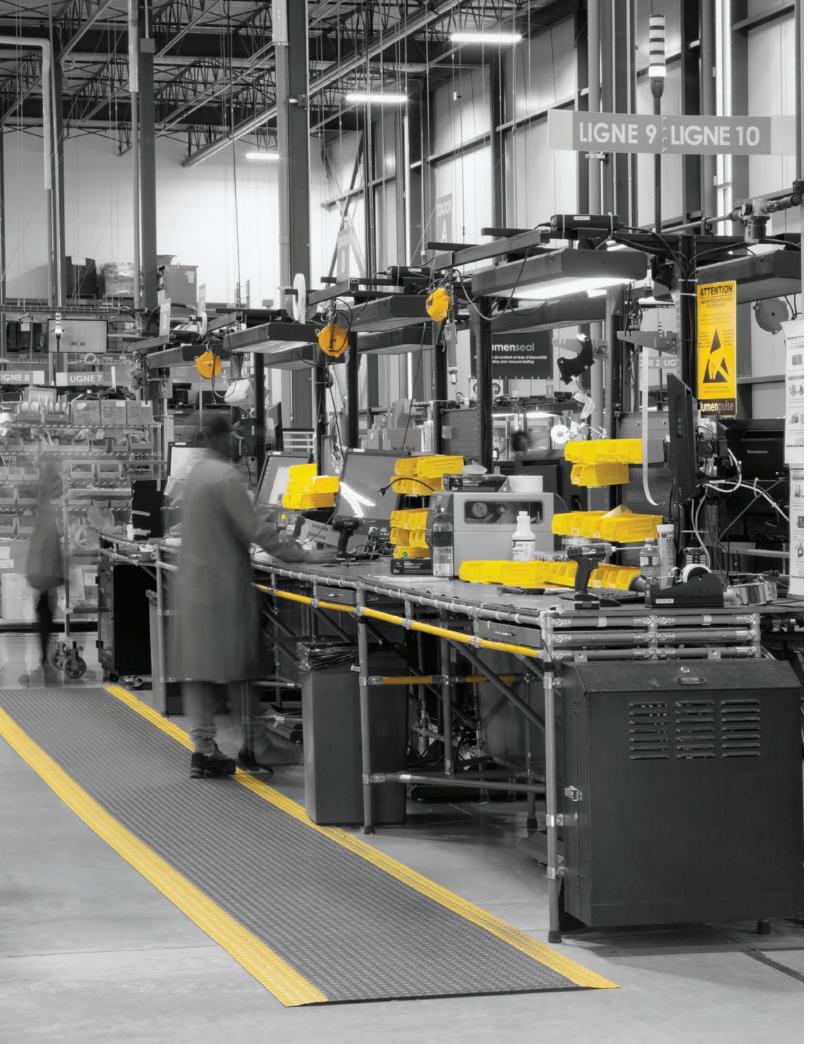
Made from architectural-grade materials with lifetimes from 79,000 up to 370,000 hours lumen maintenance (L70 at 25 °C) and a standard, five-year warranty.



Memorial Bridge
Portsmouth, New Hampshire, United States
Lighting Design: Light Time in Space
Photographer: Aaron D. Priest



Lafayette Bridge Lyon, France Photographer: Xavier Boymond



## Manufacturing Execution System

Lumenpulse's manufacturing execution system (MES) ensures the effective execution of all our manufacturing operations. It ensures that the exact product we have designed is consistently produced to our stringent requirements. MES connects, monitors, and controls all critical steps during our assembly process. Each product's assembly is monitored, and each product is individually tested throughout production.

Our use of MES assures that work instructions and manufacturing steps are carried out correctly by each of our operators. This begins with an order's release up until the finished product is shipped. Lumenpulse's MES focuses on the following steps:

Work Instructions

Integrated Testing

Traceability

Reporting

Shop Floor Control

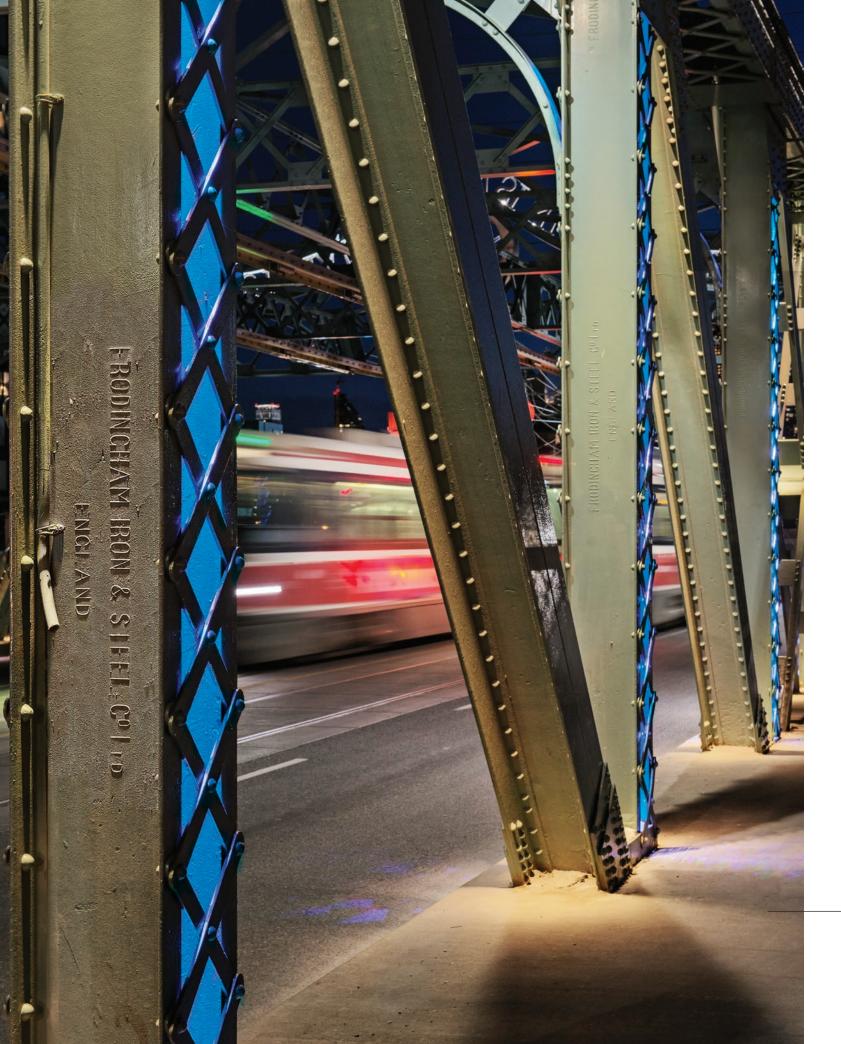
### System Validation

Lumenpulse uses System Validation to check the compliance of every element in each of our products. The validation process is not limited to a phase at the end of a product's assembly; it occurs at the end of each milestone throughout the assembly process. This helps us to guarantee that each one of our products will stand the test of time once they are in the field.

As part of System Validation, Lumenpulse can offer clients the option of Factory Acceptance Tests (FAT) to live test runs of systems in-house before they are placed in the field. Such testing ensures that controls and luminaires are ready before being placed on the project site.







### Control Ready

There should be no lighting without lighting control. Our luminaires are compatible with multiple control systems. Take control using DMX/RDM, Ethernet, or use our innovative Lumentalk technology to enable digital control over your existing AC wiring.







Riverside Bridge

Toronto, Ontario, Canada Architect: Mulvey + Banani International Inc.

Photographer: David Giral





New Haven, Connecticut, United States Lighting Design: Brandston Partnership, Inc. Photographer: Brett Beyer

**₽**DMX**rdm** 

### Pearl Harbor Memorial Bridge

Remote Device Management (RDM) is an enhancement of DMX, allowing full bidirectional control and communication for simple, convenient commissioning. With RDM, luminaires on the Pearl Harbor Memorial Bridge can communicate important information, such as their address, status, temperature, and predicted lifetime expectancy. They can also be updated or re-commissioned at any time with a simple click.

#### Products used:

- 52 x Lumenbeam Extra Large RGB
- 16 x Lumenbeam Large RGBW
- 356 x Lumenfacade Large RGB
- 1 x LumenID
- 1 x Pharos controller.

#### What DMX/RDM did for the Pearl Harbor Memorial Bridge:

- The DMX/RDM controls simplified the discovery of any RDM-enabled device on the network, creating an easy-to-commission lighting design
- With RDM/DMX, the features of each fixture can be re-discovered, updated, or re-commissioned at any time without having to climb a ladder
- The RDM-enabled fixtures on the bridge feedback important information, including DMX addresses, parameters, descriptions, and temperature
- The error alert system reports potential issues, including "Over Temperature" and "Over Voltage."

Montreal, Quebec, Canada Lighting Concept: Moment Factory Lighting Consultants: Ambiances Design Productions, ATOMIC3, Éclairage Public/Ombrages, Lucion Média, Réalisations, UDO Design Photographer: The Jacques-Cartier and Champlain Bridges, Inc.

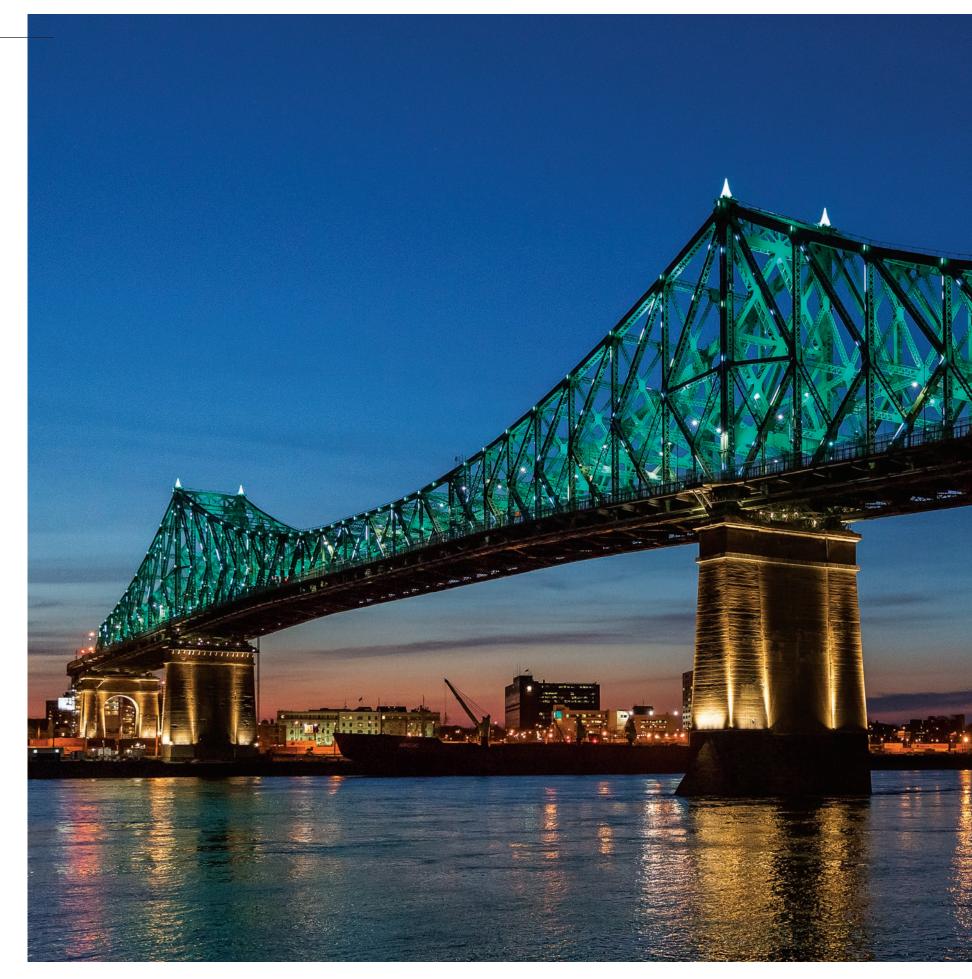
**ETHERNET** 

### Jacques-Cartier Bridge

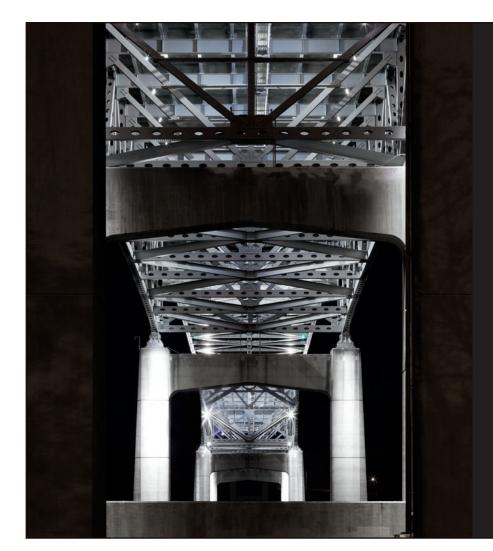
The smart Ethernet-enabled products in the Lumenpulse portfolio allowed the Jacques-Cartier Bridge illumination to leverage the many advantages of this modern networking technology, delivering convenience, performance, and flexibility to this epic undertaking.

### What Ethernet did for the Jacques-Cartier Bridge:

- The commissioning of Ethernet on the Jacques-Cartier Bridge is cost-effective and easy to operate and is fastest than all other control options
- The Ethernet cables (CAT5e) are inexpensive and easily sourced
- The RJ45 connectors are universal, reliable, keyed, and latching, with cables that can be cut to length and terminated in the field with simple tools
- The Ethernet networks are easily bridged into other networks. This enables many different scenarios, such as mixing wired and wireless networks to reach places where it may be difficult to pull cable.







Duluth, Minnesota, United States

Lighting Design: Short Elliott Hendrickson, Inc.

Photographer: James Kruger



# John A Blatnik Bridge

Lumentalk technology was used to bring LED lighting to the Blatnik A Bridge, saving the installation of new conduits, cables, and labor. The new lighting system reduced energy usage by 60%, increased flexibility, and simplified maintenance.

### How Lumentalk solved it:

- Converted DMX data so it could be sent over AC wiring across a bridge that is 7,975 feet long
- Reduced energy usage by 60%
- Saved thousands of dollars on new data cables and control boxes.

### What was required:

- 90 x Lumentalk-enabled luminaires
- 1 × Lumenlink
- 1 × Lumentranslator 2
- 1 × Pharos controller.

### What was not required:

- Thousands of feet of new data wiring
- Hours of additional labor
- Months of disruptive construction and bridge closures
- Additional conduits
- The installation of control boxes.





Beziers, France

Lighting Design: LUMINOcité

Photographer: Technilum – Hugo Da Costa

### Fonseranes Locks DMXrdm

The DMX/RDM network used for the Fonseranes Locks help the Lumenbeam luminaires to provide color-changing light that is commissioned to respect the surrounding dark of night.

#### Products used:

- 17 x Lumenbeam Large Colour Changing (RGBW), Narrow 10° Spot
- 5 x Lumenbeam Large Colour Changing (RGBW), Narrow 20° Flood
- 8 x Lumenbeam Grande Colour Changing (RGBW), Narrow 10° Spot
- 1 x Lumenbeam Medium Colour Changing (RGBW), Narrow 10° Spot
- 1 x Pharos Control System.

### What DMX/RDM did for the Fonseranes Locks:

- DMX/RDM-enabled fixtures are a low-cost alternative to other control options allowing more lighting design for less
- The DMX/RDM controls greatly decreased the number of home runs to the control room, this, in turn, decreased the cabling and conduit costs
- The use of DMX/RDM controls requires minimal hardware and simple software configuration, creating a straight-forward, user-friendly way to control a lighting design.

San Francisco, California, United States Lighting Design: Lighting Systems, Inc. Photographer: Dean J Birinyi



### Castro Street

Lumentalk enlivened San Francisco Castro Street's Business District with color-changing, digitally programmed LEDs without having to tear up the street.

#### How Lumentalk solved it:

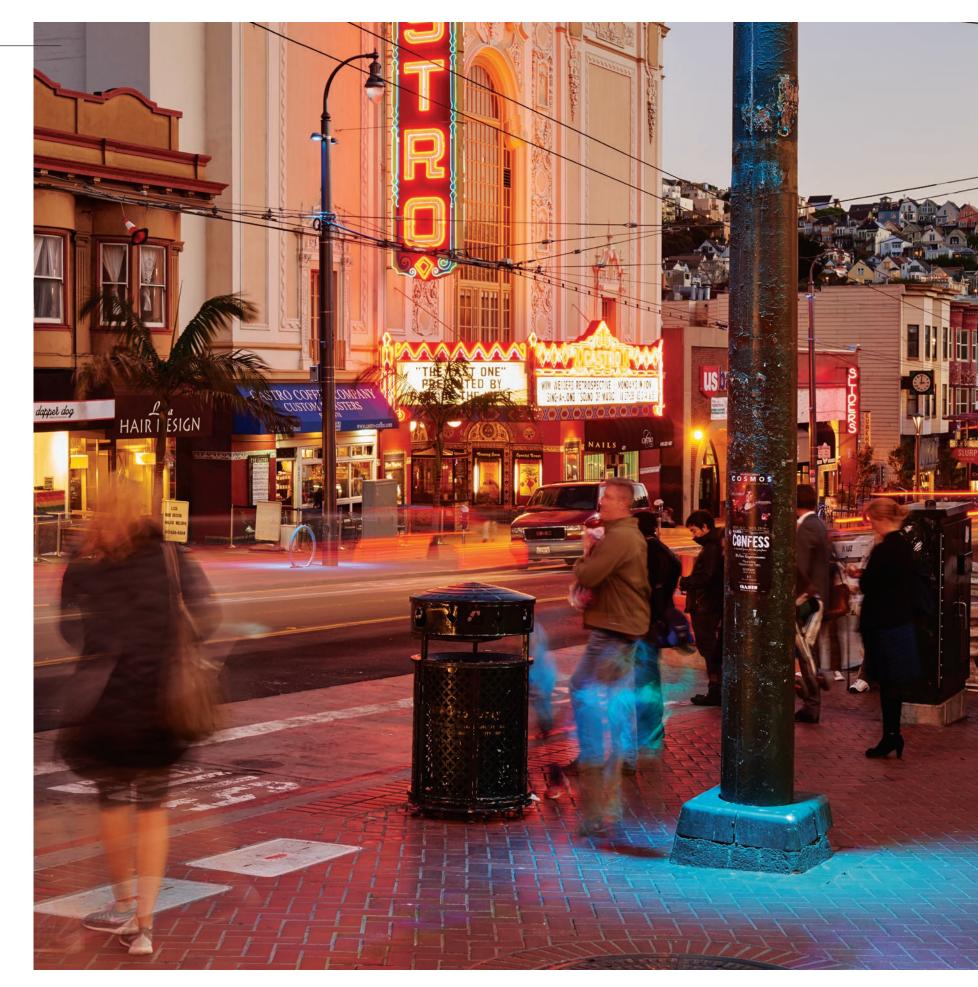
- Converted DMX data so it could be sent over AC wiring
- Made color-changing possible
- Saved thousands of dollars not digging cables and control boxes.

### What was required:

- 48 × Lumentalk-enabled luminaires
- 1 × Lumenlink
- 2 × Lumentranslator 2
- 1 × Lumentouch 2.0.

### What was not required:

- Thousands of feet of new data wiring
- Hours of additional labor
- Complicated building permits
- Months of disruptive construction.

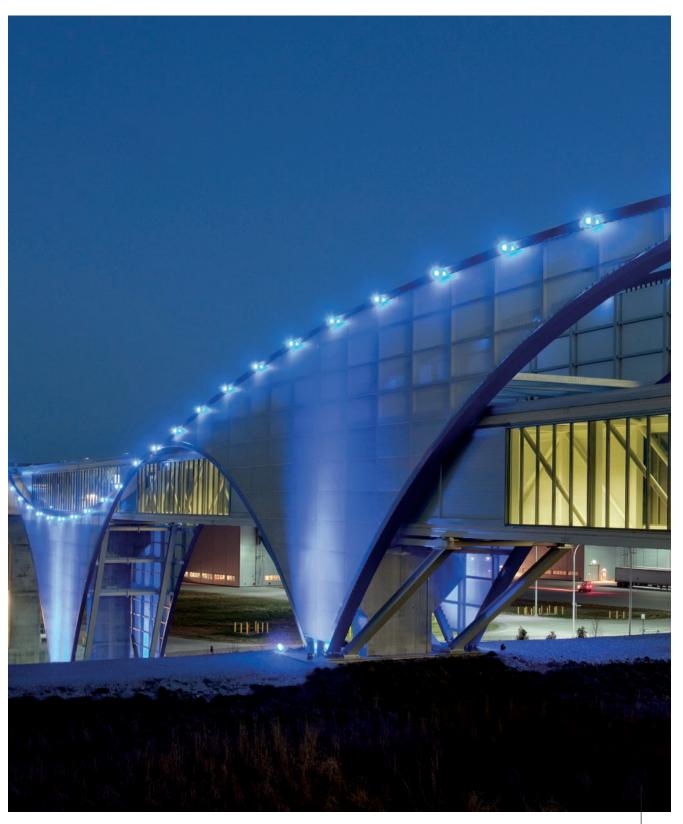




### lumencloud Wherever life might take you, Lumencloud lets you take control. Lumencloud is a subscription service that gives you remote access to your lighting controllers. lumenservices A comprehensive menu of a-la-carte commissioning and programmatic services and support offered by Lumenpulse. Both onsite and remote **lumen**cloud services are available. **lumen**cloud+ **lumen**services lumencloud+ A Lumencloud subscription add-on that, in addition to providing remote access to the control system, offers enhanced layers of services and support by Lumenpulse Expertise, Assistance, Advantage

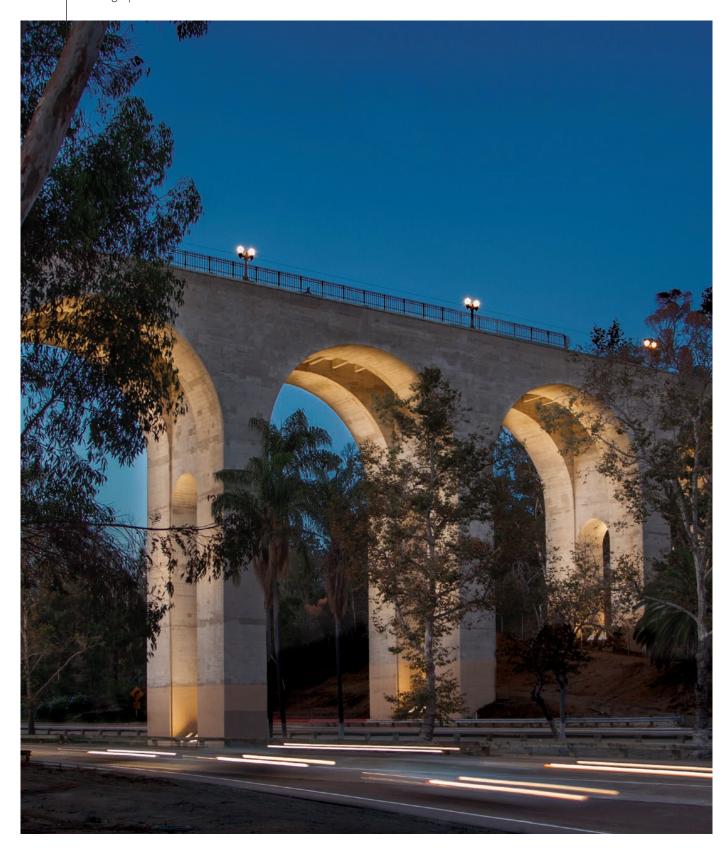


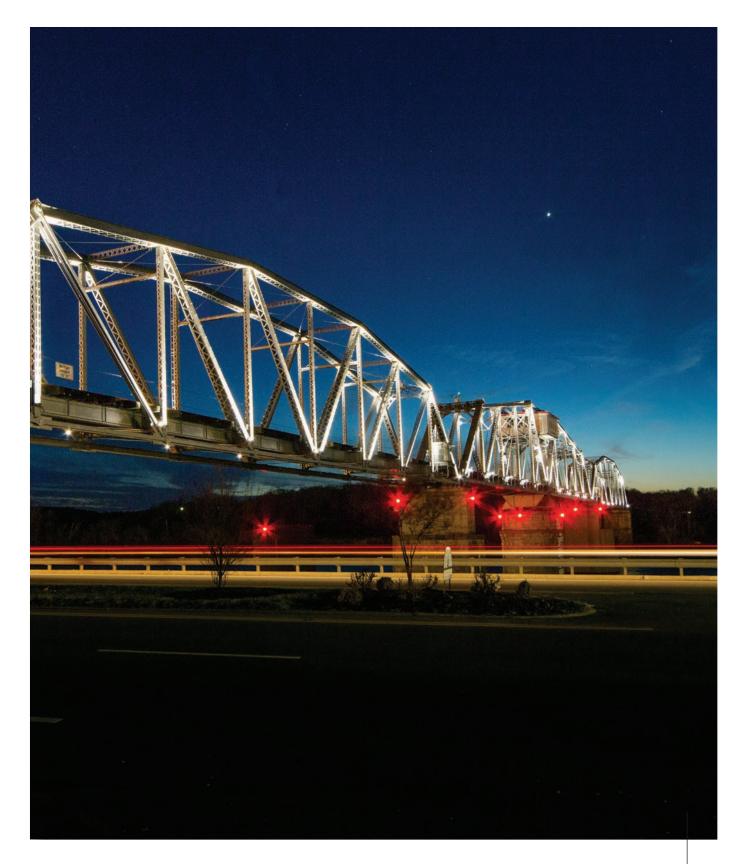
The Caille Bridges Cruseilles, France Lighting Design: Les Eclairagistes Associé Photographer: Xavier Boymond



Footbridge at Volkswagen Production Facility
Chattanooga, Tennessee, United States
Lighting Design: Aaron Albright, LC
Photographer: Jack Parker

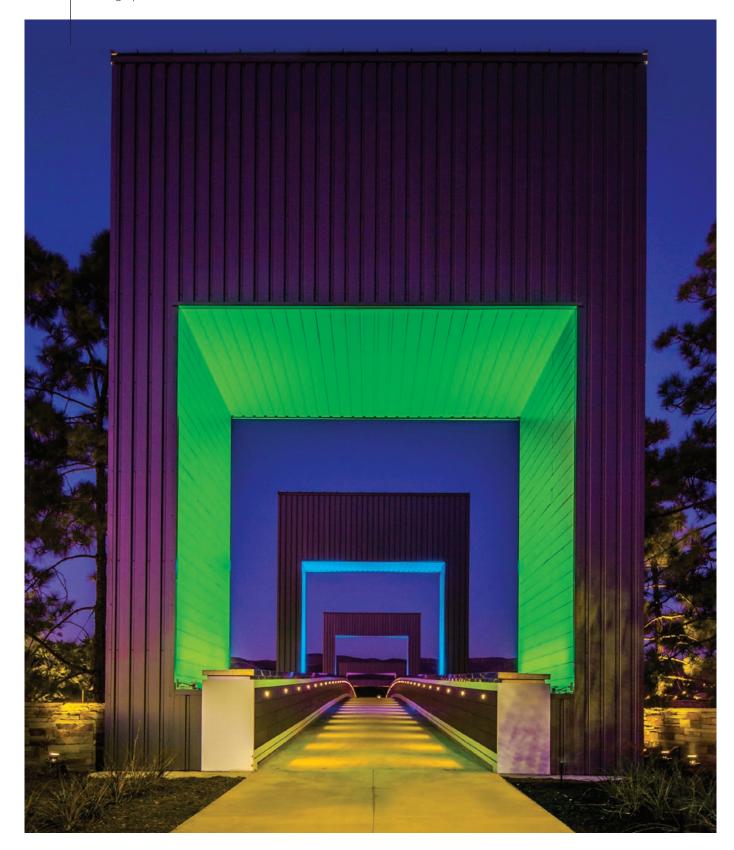
Cabrillo Bridge San Diego, California, United States Lighting Design: Illumination Arts Photographer: Steve Lerum

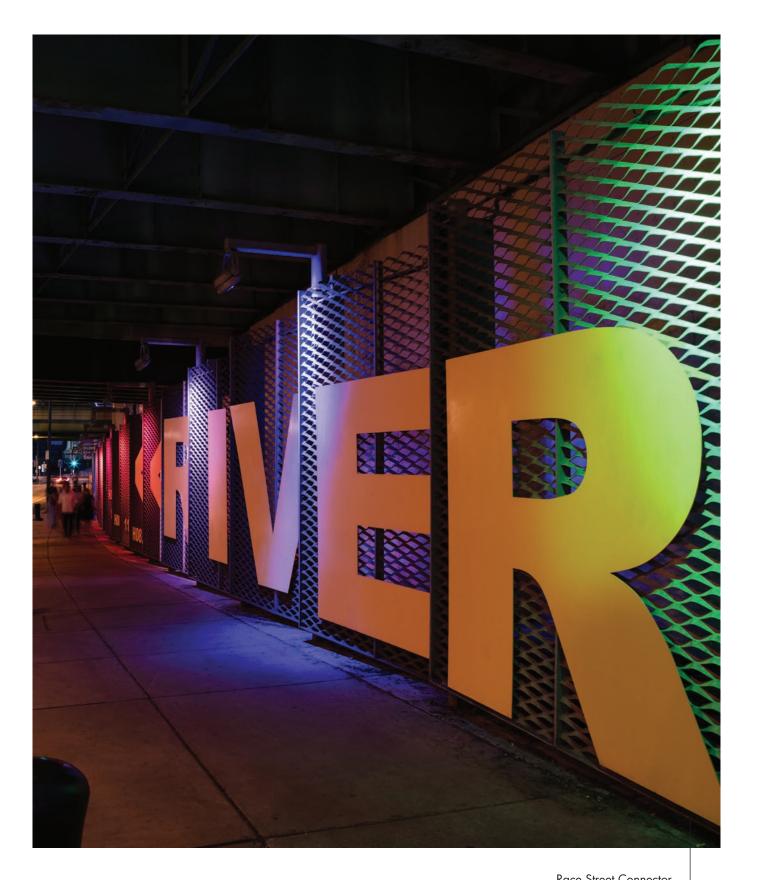




RJ Corman Railroad Bridge Clarksville, Tennessee, United States Lighting Design: Tennessee Lighting Sales Photographer: Joseph Hilliard

Irvine Pedestrian Bridge Irvine, California, United States Lighting Design: StudioK1 Photographer: Brad Nelson





Race Street Connector
Philadelphia, Pennsylvania, United States
Lighting Design: James Corner Field Operations
Photographer: Andrew Lyngarkos







#### Sales Offices and Manufacturing Facilities

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