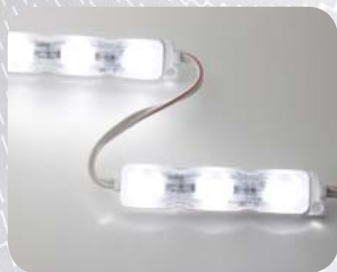


# 10 Reasons for Choosing Bitro & OpticsPRO

## NOT ALL LENS MODULES ARE BUILT THE SAME.



**BITRO PRODUCTS** are built to perform at the highest level while delivering excellent value. We pioneered in developing low-profile channel letter lighting solutions, RGB full color lighting systems, LATTICE matrix lighting, and much more for the sign industry. We are committed to helping sign planners and fabricators to choose the right products and technologies for their projects and applications.

**Here are 10 reasons why OpticsPRO is the ONLY CHOICE for your everyday sign lighting needs.**

01

### Top-quality Chips

It's IN THE INGREDIENTS. Great components are essential to great products. Bitro uses quality components and strict manufacturing discipline to deliver optimal performance and reliability.

- Tier1 LED chips
- LM80 certified
- Life over 100,000 hours
- Constant Current
- 18 Gauge Wires & Thru-wire technology
- Specified and used by top national sign shops

02

### IP68 Ultrasonic Fusion Design

WE ARE OBSESSED about water protection. **All of Bitro's channel letter modules are designed to perform under water for over 2 months.** Bitro has been potting the modules with silicone, creating complete water protection from the surroundings that are presented with outdoor signage applications.

OpticsPRO is constructed with the state-of-the-art Ultrasonic Fusion Process that has been perfected with over 2 years of R&D, that creating continuous welding around the perimeter of the modules. OpticsPRO will work under water for over 6 months.

Slice the modules! - Try slicing our modules and a competitors and see the way that we construct the modules vs our competitors. Our modules are made to the highest water protection standards in the industry!

03

### Superior Wide-angle Light Spread

**NOT ALL LENS MODULES ARE BUILT THE SAME.**

Bitro has perfected batwing beam pattern for optimized light spread providing real cost savings and true enhanced uniformity.

Cost savings - use less modules, save labor and cost, but keep the brightness.

Clean light distribution - perfect alignment and no phosphor lines!



04

## Constant Current Circuitry

Since the beginning of Bitro, we've been building our modules with **constant current circuitry** on every module for **optimal uniformity and longevity**. Constant Current Circuit, if employed correctly with the right components, ensures the modules to be constructed at a higher level of conformity to the specification and maintains the uniform brightness against the voltage drops on the chain module arrays.

05

## Completely Automated Production

**INNOVATION & AUTOMATION** is the only way for us to stay competitive. OpticsPRO series is constructed with the latest cutting edge module construction technologies that minimize human errors and increase productivity by utilizing completely automated assembly line.

06

## Thru-wire Interconnect Method

Bitro's Thru-wire Interconnect (TWI) has no connection solders. Continuous wire pair runs through the entire string of modules that minimizes voltage drops, circuit current overload, and failure points that come from manual soldering. Bitro uses **18 Gauge wire** compared to most competitors that use **20 Gauge wire**. This makes a huge difference in minimizing voltage drops. All of our modules can load the complete load in one single linear line. Most other competing modules simply cannot.

07

## Longevity that We Can Prove

LM80, TM21, and IP68 construction assure that the product will last over 100,000 hours before hitting 70% of the brightness. Bitro products are designed to perform at the same consistency over time regardless of where the products are being installed - whether it be New York, Alaska, Arizona, or Florida.

08

## Bitro Quality Standards, Integrity and Support

Bitro's strictest adherence to quality principles over time has allowed Bitro to be considered one of the top LED module manufacturers in the industry, proven by the fact that Bitro is a premier lighting supplier to many national, architectural, and regional sign shops around the continent. Bitro's customer service policy is Integrity & Transparency. We bring honesty and value to our clients. Our expert sales staff are trained to provide application-specific solutions with **reliable and knowledgeable layout service**.

09

## 5 Year Warranty

Bitro offers 5 year warranty on the parts for OpticsPRO Series module. Specific Terms and Conditions apply. Please contact Bitro for more information.

10

## Expert Consultation, Guidance and Design Assistance

Bitro's extensive resources and consultative staff will help you develop the best lighting solutions for all your signage projects.

### Offered in 3 Practical Models

#### OpticsPro **MAX**

**222** lm/ft, 1.2w / mod, 22.5 ft max load  
Maximum light output and maximum coverage For brightest applications  
Deep and large channels and sign cabinets

**\$3.80/ft**

#### OpticsPro **PLUS**

**164** lm/ft, 0.9w / mod, 30 ft max load  
Beautiful balance of light output and efficiency  
Brighter and larger channel letter applications.

**\$3.50/ft**

#### OpticsPro **LITE**

**120** lm/ft, 0.63w / mod, 45 ft max load  
Practical brightness and economic power use  
For practical channel letter lighting with maximized power supply footage.

**\$3.25/ft**