



OpticsPRO Series

Bantam

Channel Letter Lighting / Small Form Factor



BANTAM Plus Bright White (OTSP-X3PL-BW65)

features

- Small form factor design for low profile and compact applications
- Superior brightness and 162° degree beam angle of light filling illumination
- Engineered with Top Tier LED chips and equipped with Bitro's Constant Current Technology
- High quality parts and reliable manufacturing for excellent performance
- Designed for uniform illumination with durable, dependable and long-lasting construction
- Bitro's thru-wire interconnect technology for minimum voltage drop and maximum efficiency
- Backed by 7-year product / 5-year labor warranty

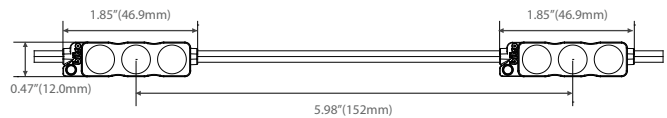
overview

Bitro's BANTAM channel letter modules are the newest addition to the acclaimed OpticsPRO series. BANTAM incorporates the same top tier LED chips and wide-beam optics as OpticsPRO in a new compact housing design, enabling use in lower profiles and smaller channels. It comes in two models - Plus and Lite as well as multiple color options for use in a variety of depths and applications.

| models | description |
|-----------|---|
| OTSP-X3PL | "BANTAM Plus". Small Body, 3-bulb Module 180 lm/ft, max 30 ft per 60W power supply |
| OTSP-X3LT | "BANTAM Lite". Small Body, 3-bulb Module 128 lm/ft, max 45 ft per 60W power supply |

models & dimension

OTSP-X3PL



3-bulb, small body, 2 modules per foot
180 lm/ft, max load: 30 ft on ASU-60-12U

OTSP-X3LT



3-bulb, small body, 2 modules per foot
128 lm/ft, max load: 45 ft on ASU-60-12U



Constant Current Technology

IP68

7/5-YEAR LIMITED WARRANTY PRODUCT/LABOR



LM80





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specifications

| Item | Series Name | OpticsPRO Series | |
|----------------------|-------------------------------------|---|--------------------|
| Model | Model Name | BANTAM Plus | BANTAM Lite |
| | Model # | OTSP-X3PL | OTSP-X3LT |
| | Intended Applications | Std. Channel Letters, Low Profile Channel Letters | |
| | Physical Dimensions | 1.85" x 0.47" x 0.35" (46.9mm x 12mm x 8.9mm) | |
| | # LED Bulbs per Module | 3 lamps | |
| Applications | Module Spacing | 2 mods/ft (6" on-center) | |
| | * Lumens | per Module | 90 lm/mod |
| | | per Foot | 180 lm/ft |
| Electrical | Power Consumption | per Module | 0.9 w/mod |
| | | per Foot | 1.8 w/ft |
| | Recommended LED Power Supply | Alpha Slimline 12V-60W Class 2 Power Supply (ASU-60-12U) | |
| | Recommend- ed Load per Power Supply | # Modules | 60 mods |
| | | Linear Ft | 30 linear ft |
| | * Lumen Efficacy (lm/w) | | 100 lm/w |
| Colors, SKUs | Color | Color Specs | SKU's |
| | Bright White | 6500K | OTSP-X3PL-BW65 |
| | Day White | 5000K | OTSP-X3PL-DW50 |
| | Soft White | 4000K | OTSP-X3PL-SW40 |
| | Warm White | 3000K | OTSP-X3PL-WW30 |
| Common Specs | Input Voltage | 12VDC | |
| | Viewing Angle | 162° | |
| | Operating Temperature | -30°C ~ 70°C / -22°F ~ 158°F | |
| | Housing | ABS styrene copolymer, Polycarbonate Optics | |
| | Wire | 18AWG, 1007, UL Approved | |
| | Waterproof Rating | IP68, approved for Dry, Damp, and Wet locations | |
| | Application Method | Double-sided tape, Mounting Hole for Mechanical Fastening | |
| | Warranty | ** 7-Year Product Warranty / 5-Year Labor Warranty | |
| | Certification | UL Recognized (SAM) for US & Canada, CE, CSA | |
| | UL File # / Ref. # | BT-CLM "Channel Letter Modules" E341583 for cRUus, E487861 for Retrofit UL | |
| | CSA File # / Ref. # | 258485, "BT-CLM" | |
| CE Ref #. | "BT-CLM" | | |
| Ordering & Packaging | Module per Tray | 75 | |
| | Module per Case | 1500 | |

* Lumen values based on 6500K Bright White Model

revised: 01/08/20

** Please request a copy of full warranty with terms and conditions

layout service

Please email estimate@bitrogroup.com
For prompt layout services, provide scaled & detail drawings.

contact bitro

Bitro Group, Inc. (Headquarters)
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Bantam Layout Guidelines

Recommended maximum spacing configuration for optimal uniformity¹

| Depth ² | Maximum Single Stroke Coverage | Module-to-Module Parameters | |
|--------------------|--------------------------------|-----------------------------|-------------------------------|
| | | Minimum Mods/ft | Mod-to-Mod Distance on Center |
| >7" | 15" | 2 mods/ft | 6" |
| 6" | 14" | 2 mods/ft | 6" |
| 5" | 12" | 2 mods/ft | 6" |
| 4" | 9" | 2.5 mods/ft | 4.8" |
| 3" | 7" | 3 mods/ft | 4" |
| 2.5" | 5" | 4 mods/ft | 3" |
| 2" | 4" | 5 mods/ft | 2.4" |

| Depth ² | Stroke-to-Stroke Spacing for multiple rows | Module-to-Module Parameters | |
|--------------------|--|-----------------------------|-------------------------------|
| | | Minimum Mods/ft | Mod-to-Mod Distance on Center |
| >7" | 12" | 2 mods/ft | 6" |
| 6" | 11" | 2 mods/ft | 6" |
| 5" | 9" | 2 mods/ft | 6" |
| 4" | 7" | 2.5 mods/ft | 4.8" |
| 3" | 4.5" | 3 mods/ft | 4" |
| 2.5" | 2.5" | 3.5 mods/ft | 3.4" |
| 2" | 2" | 5 mods/ft | 2.4" |

* Parameters are tested on 3/16" 2447 White Acrylic Face.

* Layouts are applicable to Bantam Plus and Lite. Brightness Level is proportional to relative current draw of the modules.

* Configurations outside of listed parameters may be considered acceptable, depending on user testing.

¹ Listed parameters are maximum spacing of modules required for uniform illumination of faces at any given depth.

² Module layout parameters at deeper depths (>6") may require additional modules per brightness considerations, irrespective of layout recommendation. Properties of optics lenses may impart unexpected results with specific layouts at shallow depths. Testing of module layouts at depths <3" is highly recommended.

revised: 02/15/2017

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