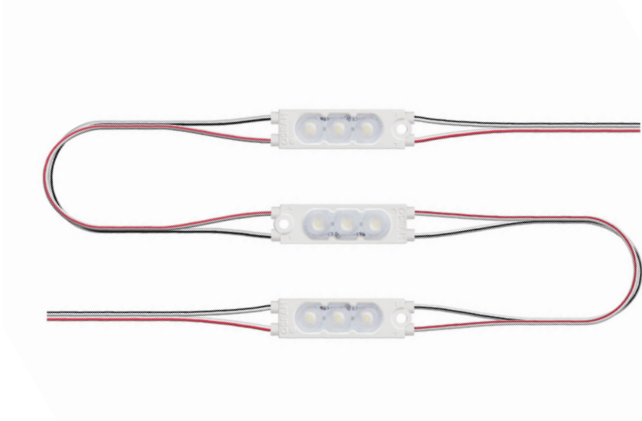


BackLED Eco M Plus

Economy BackLED Signage Modules



The BackLED Eco M Plus family features a Flat Ray lens to provide a uniform beam distribution on the face of channel letters that are 4" to 5" deep. The 6500K color temperature provides the crisp white light that has become the standard in the signage industry.

The new BackLED Eco M Plus is shipped in single board cuttable chains of 40 modules. The modules are spaced with pitch of 7.9".

All BackLED Plus modules are optimally paired with OPTOTRONIC 12V_{bc} power supplies, available in both dimming and non-dimming models. These modules are listed in the UL Sign Components Manual (SAM) for new signage installations and are UL Classified for retrofit installations when paired with our OPTOTRONIC power supplies.

Application Information

Applications

- Backlighting of small or medium channel letters
- Backlighting shallow box signs
- Illuminated advertising

Key Features & Benefits

- Flat Ray lens optics provide uniform distribution in 4" to 5" channel letters
- BackLED Eco M Plus is available in 6500K
- Single board cuttable chain of LED modules connected with flexible cables
- LEDs binned to SDCM<4 color consistency
- Fully integrated heat sink
- IP64 rated to protect against dust and splashed water
- Fast accurate installation is simplified through pre-mounted adhesive tape and mounting holes
- Optimal operation on OPTOTRONIC® 12V_{bc} and 12V_{bc} dimmable power supplies

Product Offering

Type	Ordering Abbreviation	Lumens/ft.	Color
BackLED Eco M Plus	BA-Eco-M-PL-865 G1	102	6500K

Specifications and Certifications



Listed in the Sign Components Manual (SAM) (File# E258264)



BackLED Plus modules are UL Classified for sign retrofits when paired with our OPTOTRONIC power supplies. (UL File # E311887)



OSRAM



Ordering Information

Item Number	Ordering Abbreviation	Length (ft.)	Number of Modules	Module Pitch (in)	Color Temperature	Voltage (Vdc)	Power per Module (W) ¹	Lumens per Module	Watts/ft	Lumens/ft	LPW	Case Qty.
57830	BA-Eco-M-PL-865 G1	26.8	40	7.9	6500K	12	0.72	67	1.1	102	93	5

Notes:

1. Nominal ratings at ambient of 25°C.
2. All data is related to the entire module. Data reflects statistical mean values. Actual data may differ depending on variances in the manufacturing process.
3. Performance values were taken at steady state. Instant-on measurements may be higher.

Ordering Guide

BA	-	Eco	-	M	-	PL	-	8	65	G1
BA = BackLED		Economy Model		M = Medium Size		Module with Lens PL = Plus		CRI >80	Color Temperature 65 = 6500K	1st Generation

Power Supply Information

Item Number	Ordering Abbreviation	BackLED Eco M Plus Max. No. of Modules
51604	OT20W/12V/UNV	20
51632	OT60W/12V/UNV	60
51633	OT60W/12V/UNV/DIM	60

Minimum and Maximum Ratings

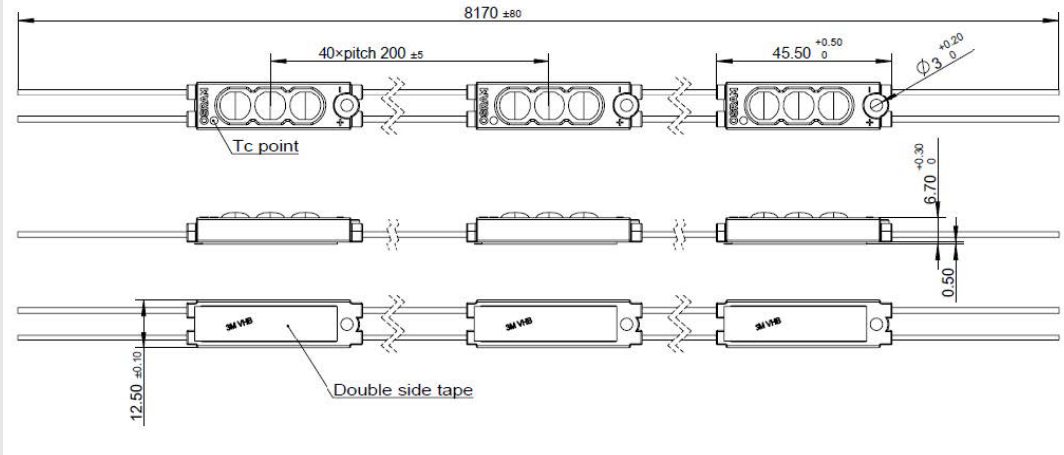
Parameter	BackLED Eco M Plus Values
Operating Temperature at Tc point	-25 to +70°C (-13 to +158°F)
Storage Temperature Range	-25 to +80°C (-13 to +176°F)
Voltage Range	12–13Vdc

Notes:

1. Exceeding maximum ratings for operating and storage temperature will reduce expected lifetime or destroy the LED module.
2. Exceeding maximum ratings for operating voltage will cause hazardous overload and will likely destroy the LED module.
3. The temperature of the LED module must be measured at the Tc point according to EN60598-1 in a thermally constant status with a temperature sensor or a temperature sensitive label.

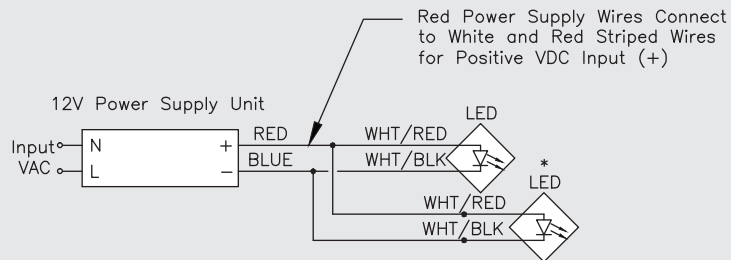
Assembly Diagram

BackLED Eco M Plus



All dimensions in inches (mm) unless noted.

Wiring Diagram



* See Power Supply information Table for Maximum loading guidelines

LEGEND:

- Splice Point
 - Potential Splice Point
 - ◊ LED
 - ◊ LED
- 1 LED Module (UON)

Safety Information

WARNING: ONLY QUALIFIED PERSONNEL SHOULD PERFORM INSTALLATION. TO AVOID ELECTRICAL SHOCK OR COMPONENT DAMAGE, DISCONNECT POWER BEFORE ATTEMPTING INSTALLATION OF THE POWER SUPPLIES AND/OR MODULES.

Failure to install the power supplies and/or LED modules in accordance with the National Electric Code (NEC), all applicable Federal, State and local electric codes as well as the specific Underwriters Laboratories (UL) safety standards for the installation, location and application may cause serious personal injury, death, property damage and/or product malfunction.

1. The LED module itself and all its components shall not be subjected to mechanical stress and assembly must not damage or destroy conducting paths on the circuit board.
2. Installation of LED modules shall be made with regard to all applicable electrical and safety standards. Only qualified personnel should be allowed to perform installations.
3. Observe correct electrical polarity; incorrect polarity may destroy the module.
4. Electrostatic Discharge (ESD) precautions shall be incorporated when handling or installing the module. (For more information, reference document # LED093 ESD Protection for LED Systems.)
5. Modules should be attached securely to the intended substrate, but do not over-tighten screws or rivets. Heavy vibration should be avoided.

Assembly Information

1. Mounting tape is provided as an installation aid only, not for permanent adhesion. It is required that all modules are secured to the mounting surface using an adhesive such as silicone or screws of appropriate size.
2. Do not over-tighten mounting screws as over-torque could damage the module housing. Do not exceed 10 in-lbs torque.
3. The LED module shall not be subject to mechanical stress or heavy vibration.
4. When using power supplies other than OSRAM OPTOTRONIC®, power supply voltage must not fall below 12Vdc.
5. For complete installation instructions, refer to BackLED Plus Installation Instructions LED349.

Warranty

Covered by a limited 5 year System Warranty. Please Refer to Signage Warranty (LED087).

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The OSRAM logo is displayed in a large, bold, orange, sans-serif font.