

Ultra High-Output COB LED Strip

Product Overview

Ultra high-output COB LED strip designed for architectural lighting applications requiring maximum brightness and flawless light uniformity. Featuring **1600 LEDs per metre** on a **30 mm wide PCB**, this strip delivers a seamless, dot-free line of light with an output of up to **4300 lumens per metre**. Intended for use in suitable aluminium profiles to ensure correct thermal management and long service life.

Key Features

- COB (Chip-On-Board) LED technology
- 1600 LEDs per metre for exceptional uniformity
- Ultra high output: up to 4300 lm/m
- 30 mm wide PCB for improved heat dissipation
- Continuous, dot-free illumination
- 24V DC constant voltage operation
- Designed for architectural aluminium profiles

Typical Applications

- Cove and ceiling feature lighting
- Architectural recesses and bulkheads
- Light boxes and luminous ceilings
- Feature walls and large linear installations
- Commercial and hospitality interiors

Technical Specifications

Parameter	Specification
LED Type	COB (Chip-On-Board)
LED Density	1600 LEDs per metre
PCB Width	30 mm
Input Voltage	24V DC
Luminous Output	Up to 4300 lm/m
Light Effect	Continuous, dot-free
Installation	Aluminium profile required
Environment	Indoor use

Power Consumption

Nominal Power: 40 W per metre (typical for 4300 lm/m output)

Final power draw may vary slightly depending on CCT and binning. Always confirm exact wattage before final driver selection.

Driver Sizing & Load Calculation Guide

Correct driver sizing is critical for performance and longevity. Drivers should be loaded to **no more than 80%** of their rated capacity.

Step 1 – Determine Total Strip Length

Example: 8 metres total

Step 2 – Calculate Total Power Load

$40 \text{ W/m} \times 8 \text{ m} = \mathbf{320 \text{ W total load}}$

Step 3 – Apply 80% Driver Loading Rule

$320 \text{ W} \div 0.8 = \mathbf{400 \text{ W minimum driver capacity required}}$

Recommended Driver Selection Examples

Strip Length	Total Load	Minimum Driver Size
3 m	120 W	150 W driver
5 m	200 W	250 W driver
8 m	320 W	400 W driver
10 m	400 W	500 W driver

For large installations, multiple drivers and parallel feeds are recommended.

Maximum Run Length & Voltage Drop

Due to the high power density, maximum recommended run length from a single feed is **5 metres**.

Best Practice: - Feed longer runs from both ends or centre-feed - Use appropriately sized low-voltage cabling - Avoid daisy-chaining long continuous runs

Thermal Management Requirements

This product must be installed in a **substantial aluminium profile**.

- Minimum profile internal width: ≥ 30 mm
- Use thermally conductive mounting surfaces
- Avoid enclosed, unventilated cavities

Failure to manage heat correctly may reduce lifespan and void warranty.

Installation Notes

- Cut only at marked cut points
 - Observe correct polarity
 - Do not power when tightly coiled
 - Test before final installation
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Ordering Information

Available in multiple colour temperatures. Supplied in standard reel lengths. Full photometric data and LM-80 information available on request.

Disclaimer

Specifications are subject to change without notice. Installation must be carried out by a qualified professional in accordance with local electrical regulations.