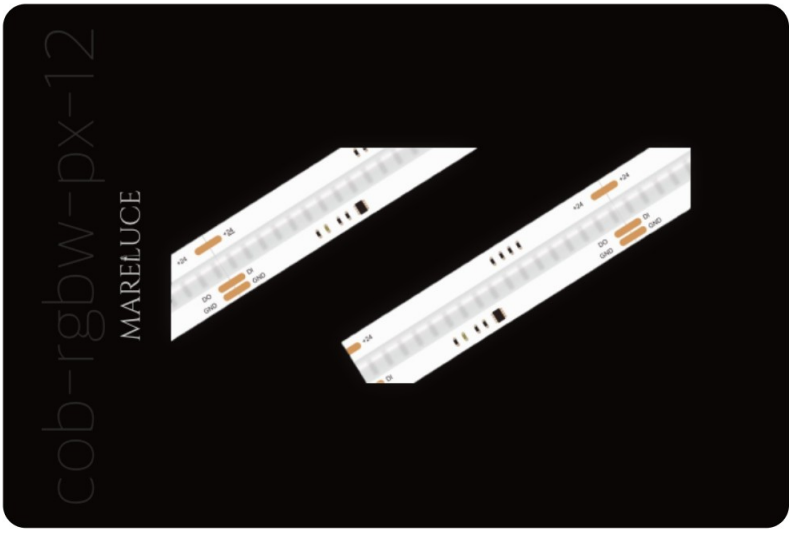
LED STRIP · COB · ADDRESSABLE RGBW

# COB-RGBW-PX-12

12 mm dot-free addressable RGBW COB LED strip, WS2811, 896 chips/m, 48 W/m · 24 V DC




| PCB WIDTH | POWER |
|---|---|
| 12 mm | 48 W/m |

| VOLTAGE | CUT UNIT |
|---|---|
| 24 V DC | 50 mm |

| IC | CONTROL |
|---|---|
| WS2811 | SPI |

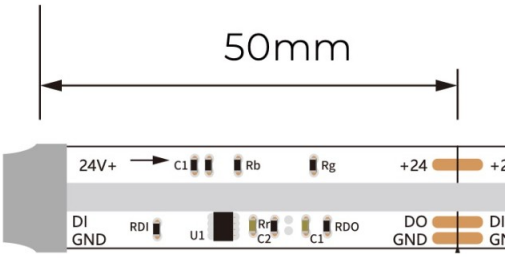
## Overview

COB-RGBW-PX-12 is a high-output addressable chip-on-board LED strip with 896 RGBW chips per metre under a continuous diffusing layer, driven by WS2811 ICs in 50 mm pixels. Colour effects and a dedicated 4000K white channel run as one seamless, dot-free line, delivering both animated feature lighting and up to 1680 lm/m of functional light on board. 24 V DC, SPI single data line.

## Specifications

| | |
|---|---|
| Dimension | 5000 × 12 × 1.8 mm (5 m reel) |
| LED | COB RGBW, 896 chips/m |
| IC | WS2811, SPI single data line |
| Pixels | 50 mm per pixel |
| Cut unit | 50 mm |
| Power | 48 W/m (all channels on) |
| Voltage | 24 V DC |
| White channel | 4000K · CRI 90 |
| Beam angle | 180° |
| Ambient temperature | −25 °C to +45 °C |
| Storage temperature | −25 °C to +60 °C |
| Max. run length | 5 m |
| Min. bend radius | 10 mm |
| Lead wire | 3-core with connectors at both ends |
| Protection | IP20 standard; IP52, IP65H, IP65, IP67 on request |

## Cut Unit



ORDERING INFORMATION

## Product Code

| COB-RGBW-PX-12 | RGBW | 24 V |
|---|---|---|
| MODEL | COLOUR | VOLTAGE |
| | WS2811 · SPI | 24 V DC |

Example: **COB-RGBW-PX-12**, 24 V DC. Controlled by any SPI pixel controller supporting WS2811 with RGBW mapping.

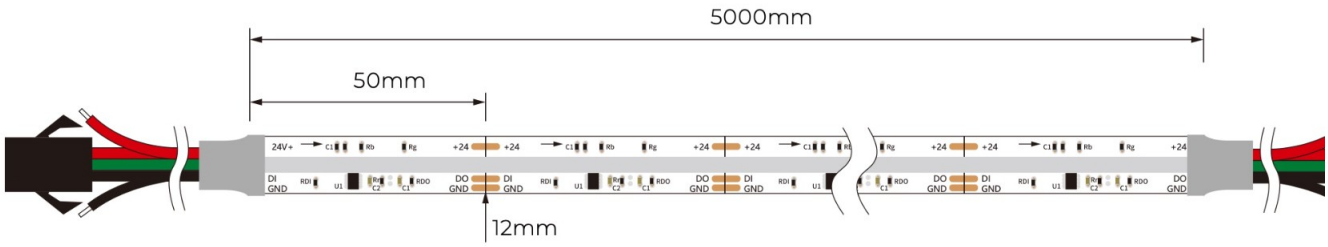
## Photometric Data

| CHANNEL | CCT / COLOUR | POWER | LM/M | LM/W |
|---|---|---|---|---|
| **Red** | R | 13 W/m | 195 | 15.0 |
| **Green** | G | 13 W/m | 741 | 57.0 |
| **Blue** | B | 13 W/m | 130 | 10.0 |
| **White** | 4000K | 13 W/m | 702 | 54.0 |
| **RGBW (all on)** | — | 48 W/m | 1680 | 35.0 |

Measured on IP20 strip at 24 V DC; one channel at full output, RGBW = all channels on. White channel CRI 90. Efficacy calculated from the measured lumen and power values.

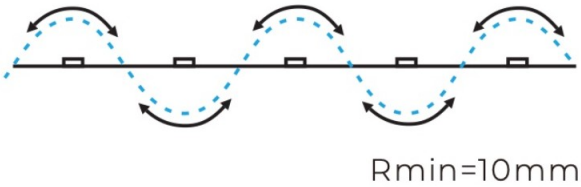
DIMENSIONS & INSTALLATION

## Dimensions (unit: mm)




5 m reel, 12 mm PCB; cut every 50 mm (one pixel); connector leads at both ends.

## Bending



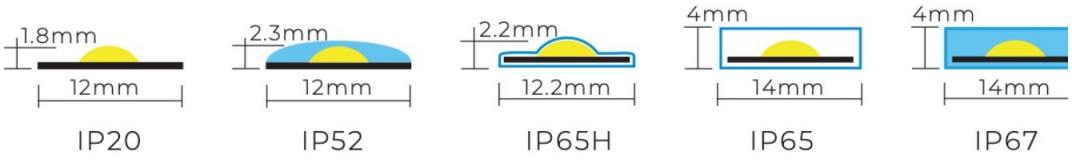

Flexible strip; minimum bend radius 10 mm.

## Wiring & Control

| | |
|---|---|
| Cores | +24 V · Data DI/DO · GND |
| IC | WS2811 |
| Controller | SPI pixel controller, WS2811 compatible |
| Dimming | PWM below 2 kHz |

3-core lead wire with waterproof connectors at both ends.

## Waterproof Versions




| VERSION | CONSTRUCTION | SIZE (W × H) |
|---|---|---|
| IP20 | Bare PCB | 12 × 1.8 mm |
| IP52 | Silicone coating | 12 × 2.3 mm |
| IP65H | Heat-shrink tube | 12.2 × 2.2 mm |
| IP65 | Silicone tube | 14 × 4 mm |
| IP67 | Silicone tube, filled | 14 × 4 mm |

Light output and power may vary by up to ±10% due to production and component tolerances.