WS2812 Addressable RGB Waterproof LED Strip 60LED/m DC5V 10mm – 5 Meter Reel

The **WS2812 Addressable RGB Waterproof LED Strip** is a highly versatile and visually striking digital LED lighting solution designed for creative lighting projects, architectural accents, decorative installations, and professional electronic applications. Featuring **60 individually addressable RGB LEDs per meter**, a **DC 5V power supply**, and a **total reel length of 5 meters**, this LED strip offers precise control, vibrant color output, and flexible installation options for both indoor and outdoor environments.

Built around the popular **WS2812 intelligent LED chipset**, this strip allows each LED to be controlled independently, enabling dynamic lighting effects such as color chasing, animations, gradients, and pixel-level displays. Its waterproof construction further expands its usability, making it suitable for installations exposed to moisture, humidity, or occasional splashes.

Learn more about addressable LEDs and how they work here:
https://learn.adafruit.com/adafruit-neopixel-uberguide

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WS2812 Addressable RGB WaterProof LED Strip 60LED/m DC5V 10mm[/caption]

Individually Addressable WS2812 RGB LEDs

At the core of this LED strip is the **WS2812 integrated control IC**, which combines an RGB LED and a driver chip into a single compact package. Each LED receives data serially and passes it to the next LED, allowing full **pixel-by-pixel control** using just one data line.

This design enables complex lighting patterns and animations that are not possible with traditional non-addressable RGB LED strips. Users can program each LED to display a different

color and brightness level, making the strip ideal for advanced lighting projects and interactive designs.

Technical background on WS2812 LEDs:
https://components101.com/led/ws2812-rgb-led-pinout-datasheet

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High LED Density – 60 LEDs per Meter

With **60 LEDs per meter**, this strip provides a high level of brightness and smooth visual effects without noticeable gaps between pixels. Over the full **5-meter reel**, the strip contains **300 addressable RGB LEDs**, offering excellent resolution for lighting effects, signage, and decorative displays.

The dense LED spacing makes it suitable for applications where uniform illumination and smooth color transitions are important, such as ambient lighting, cove lighting, and custom display projects.

DC 5V Operation for Easy Integration

The strip operates on **DC 5V**, making it compatible with a wide range of controllers, development boards, and power supplies. It works seamlessly with popular platforms such as **Arduino, Raspberry Pi, ESP8266, ESP32**, and dedicated LED controllers.

Because WS2812 LEDs can draw significant current at full brightness, proper power distribution is important for longer runs. Power injection at multiple points is recommended for consistent brightness across the entire 5-meter length.

Guidance on powering addressable LED strips:
https://learn.sparkfun.com/tutorials/powering-addressable-led-strips/all

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Waterproof Design for Expanded Applications

This WS2812 LED strip features a **waterproof protective coating**, making it suitable for outdoor installations and environments where moisture may be present. The waterproof layer helps protect the LEDs and circuitry from dust, splashes, and humidity, increasing durability and longevity.

Typical waterproof LED strips are rated for applications such as decorative outdoor lighting, garden features, architectural accents, and semi-exposed installations. However, proper sealing of cut ends and connectors is essential to maintain waterproof performance.

More on waterproof LED strip ratings: https://www.ledsupply.com/blog/waterproof-led-strip-lights-explained/

Slim 10mm PCB for Flexible Installation

With a **10mm wide flexible PCB**, this LED strip is easy to install in tight spaces, aluminum profiles, channels, or custom enclosures. The flexible design allows the strip to bend around curves and corners, making it ideal for creative layouts and non-linear designs.

The rear adhesive backing simplifies mounting on clean, flat surfaces, while optional mounting clips or channels can be used for more permanent or professional installations.

Cuttable and Extendable Design

The strip can be **cut at designated cut points**, allowing users to customize the length to match specific project requirements. Each segment remains individually addressable, ensuring flexibility without sacrificing functionality.

Multiple strips can also be connected together (with appropriate power considerations), making it easy to scale installations from small decorative accents to large lighting displays.

Wide Range of Applications

The **WS2812 Addressable RGB Waterproof LED Strip** is widely used in:

- Decorative and architectural lighting

- Gaming setups and PC case lighting

- Smart home and ambient lighting systems

- Stage, event, and entertainment lighting

- Outdoor decorative installations

- DIY electronics and maker projects

- Signage, displays, and pixel art

Its combination of addressable control, waterproof protection, and high LED density makes it suitable for both hobbyists and professionals.

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WS2812 Addressable RGB WaterProof LED Strip 60LED/m DC5V 10mm[/caption]

Key Specifications

- LED type: WS2812 addressable RGB

- LED density: 60 LEDs per meter

- Total length: 5 meters

- Total LEDs: 300

- Operating voltage: DC 5V

- Strip width: 10mm

- Control signal: Single-wire digital data

- Waterproof: Yes (coated)

- Color output: Full RGB, individually controllable

Why Choose the WS2812 Addressable RGB Waterproof LED Strip?

This LED strip offers an excellent balance of **visual performance, flexibility, and ease of control**. Its individually addressable LEDs allow for unlimited creative possibilities, while the waterproof construction and slim design ensure reliability across a wide range of applications. Whether used for artistic displays, smart lighting systems, or professional installations, this WS2812 LED strip delivers consistent, vibrant, and programmable lighting effects.