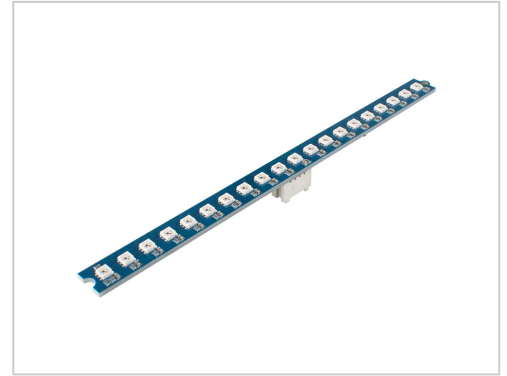


seeed Grove - RGB LED Stick (20x WS2813)

Grove - RGB LED Stick (20-WS2813 Mini) is a cost-effective full colour LED stick with 20 chainable and programmable WS2813 mini LEDs.

Product number SE-104020170

Weight 0.016kg



Product description

Seeed Grove - RGB LED Stick (20-WS2813 Mini)

The Grove - RGB LED Stick (20-WS2813 Mini) is a cost-effective full-colour LED stick equipped with 20 cascadable and programmable WS2813 Mini LEDs. All LEDs can be controlled via a single signal pin. The stick is suitable for creating numerous lighting effects.

The Grove - RGB LED Stick integrates 20 full-colour RGB LEDs with an update frequency of 2 kHz, with each LED achieving a greyscale of 256, which enables a 16,777,216-colour display. All LEDs on the stick are WS2813 Mini, an intelligent control LED with high cost efficiency. The WS2813 supports the signal breakpoint function, which allows the remaining LEDs to continue to function even if one LED fails.

WS2813-Mini is an intelligent LED light source that integrates the control circuit and RGB chip in a 3535 housing. Internally, it contains an intelligent digital data latch, a signal recovery circuit, a precision oscillator and a 12V voltage programmable constant current source. This structure achieves a highly consistent colour display. Thanks to the dual signal wires, the signal line is not interrupted even if one pixel fails and the overall output is maintained.

The product can be used to create a variety of lighting effects, for example for Christmas or Halloween decorations and light shows. As long as two or more neighbouring LEDs are not damaged, the remaining LEDs will continue to function.

Areas of application include guardrail tube series, point light display series, flexible/rigid light strip series and module series as well as the illumination of stage costumes, innovative gadgets and other electronic products.

The Grove - RGB LED Stick connects directly to Seeeduino or Arduino+BaseShield via a Grove cable, eliminating the need for soldering or complicated wiring.

Features at a glance

- 20 cascadable WS2813 mini LEDs
- 256 grey levels per pixel for 16,777,216 colours
- 2 kHz refresh rate
- Breakpoint resume: function even if individual LEDs fail
- Signal transmission over more than 5 metres without additional circuitry
- Grove-compatible for easy integration with Seeeduino or Arduino

Compatibility

- Seeeduino
- Arduino with base shield

Technical specifications

- Operating voltage: 3.3V / 5V
- Operating temperature: -25°C to +85°C
- Storage temperature: -40°C to +105°C
- Constant current per RGB channel: 16mA
- Interface: Digital
- Dimensions: 147mm x 10mm x 10mm (L x W x H)
- Weight: 3.7g
- Gross weight: 13g

Other data

- WS2813 mini LEDs based on 3535 component package
- Internal oscillator and signal recovery for stable data transmission

Scope of delivery

- 1x Grove - RGB LED Stick (20 - WS2813 Mini)
- 1x Grove cable

Links

- [Further information and documentation](#)

Product properties

| | |
|--------------------------|---------------|
| Gross Weight (kg) | 0.016 |
| Country of Origin | China |
| Brand | seeed |
| Product ID | SE-104020170 |
| Manufacturer ID | 104020170 |
| EAN | 5904422324001 |
| Zolltarifnummer | 84717060 |

More images

