

WS2812 RGB LED Ring Lamps

Product Overview

01-02-2023

For the most up-to-date information, visit www.mouser.com or the supplier's website.

Description

DFRobot WS2812 RGB LED Ring Lamps come in a variety of colors and can be cascaded. These LED ring lamps require only one signal line to control the color and status of all leads. The WS2812 RGB LED ring lamps can be combined with sensors to convert them into a compass that tells direction, a cool clock, a tomato timer, or a countdown timer. These LED ring lamps can also be turntable lottery machines, colorful decorations for robots, DIY interactive projects, and venue layouts. Multiple lamp rings with different numbers of lamp beads can be cascaded and controlled individually. The cascading method is to connect the OUT terminal of the first lamp ring to the IN terminal of the second lamp ring, and so on.



Features

- Full-color WS2812 RGB
- 1-Wire bus control
- Support cascading of multiple LED rings
- Support multiple programming platforms:
 - Mind+, MakeCode, and Arduino IDE

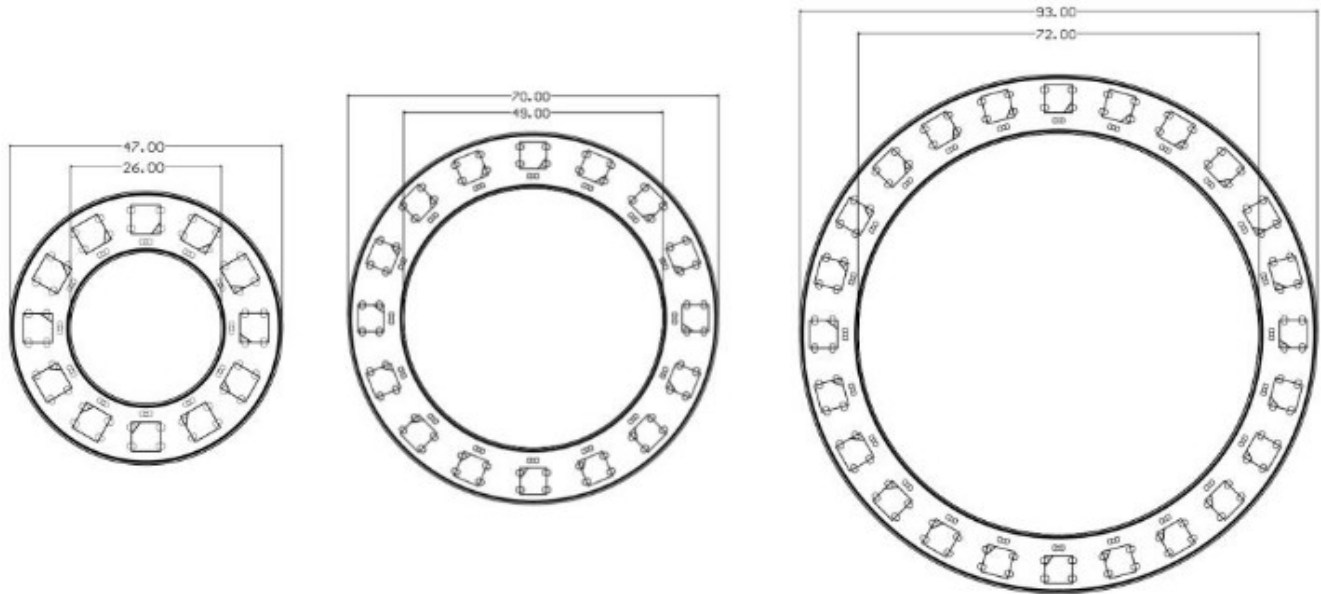
Specifications

- 3.3V to 5V working voltage range
- <100mA maximum operating current
- Interface type:
 - PH2.0-3P
- WS2812 lamp bead model
- 12 number of lamp beads
- 16 million colors

Applications

- STEM education

Dimensions



LED Ring	Inner Ring Diameter	Outer Ring Diameter
RGB LED Ring - 12 Beads	2.6cm(1.02 inch)	4.7cm(1.85 inch)
RGB LED Ring - 16 Beads	4.9cm(1.93 inch)	7.0cm(2.76 inch)
RGB LED Ring - 24 Beads	7.2cm(2.83 inch)	9.3cm(3.66 inch)

Mouser Part Numbers

[View All Parts](#)

To learn more, visit <https://www.mouser.com/new/dfrobot/dfrobot-ws2812-ring-lamp/>