Raspberry Pi Sense HAT - For the Pi 3 / 2 / B+ / A+

PRODUCT ID: 2738

1 IN STOCK

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DESCRIPTION

TECHNICAL DETAILS
DESCRIPTION

Control the same hardware as used in space...build your very own Astro Pi with the new Raspberry Pi Sense HAT! The Raspberry Pi Sense HAT is attached on top of the Raspberry Pi via the 40 GPIO pins to create an ‘Astro Pi’. The Sense HAT has several integrated circuit based sensors can be used for many different types of experiments, applications, and even games. And it's being used in conjunction with the Raspberry Pi Foundation to perform science experiments aboard the International Space Station (ISS)!

The sensors enable you to read:

- Orientation (yaw, pitch & roll) via an accelerometer, 3D gyroscope, and magnetometer
- Pressure
- Humidity
- Temperature

The Sense HAT supports a whole host of projects for the Raspberry Pi, it can measure how fast is the Pi itself travelling (i.e. measure your speed), how hot is it? how humid is it? (air humidity), which direction is the Raspberry Pi facing? And more.

The 8x8 LED Matrix enables you to display the data from the various sensors, it can show you which way is geomagnetic North by programming a compass using the magnetometer, or simply be used to play games like Tetris, Pong and Snake with the joystick. The joystick can also be used to enable a human user to interact with the programs running on the Raspberry Pi Sense HAT.

Writing programs for the Sense HAT is very simple with a Python library available to get started quickly and easily. For a truly out of world projects check out the AstroPi website, containing a host of ideas and instructions.

To Install:

- Connect your Sense HAT to the Raspberry Pi via the 40 GPIO Pins
- Open up a terminal and run the following command:
  ```bash
  ```
  (This will take approximately 5 minutes to run on the Raspberry Pi 2 Model B, and approximately 20 minutes on earlier models of the Raspberry Pi)
- When the install is finished you will need to reboot your Raspberry Pi

Note: The Raspberry Pi Sense HAT is compatible with the Raspberry Pi 3, Raspberry Pi 2, Model B+, and Model A+, but NOT the earlier 26-pin models of Raspberry Pi 1 Model B & A’s. Pi not included!

TECHNICAL DETAILS

- Gyroscope
  - Angular rate sensor (dps): “245/500/2000
- Accelerometer
  - Linear acceleration sensor (g): “2/4/8/16
- Magnetometer
  - Magnetic sensor (gauss): “4/8/12/16
- Barometer: 260 - 1260 hPa absolute range (accuracy depends on the temperature and pressure, “0.1 hPa under normal conditions)
- Temperature sensor: Accurate to “2°C in the 0-65°C range
- Relative humidity sensor: Accurate to “4.5% in the 20-80%RH range, accurate to “0.5°C in 15-40°C range
- 8x8 LED matrix display
- Small 5 button joystick
- Standoffs may come in plastic or metal varieties

Downloaded from Arrow.com.
Product Dimensions: 65.1mm x 56.6mm x 13.9mm / 2.6" x 2.2" x 0.5"
Product Weight: 20.4g / 0.7oz