



PocketLab Voyager

SEN-15012

The PocketLab Voyager is an all-in-one science lab that is capable enough for a professional engineer and simple enough for a 4th grade student. The Voyager can detect and measure multiple forms of sensor data including motion, light, magnetic fields, and weather. You can also attach an external temperature probe as well but one is not included in this kit. The Voyager has been designed to work with either the PocketLab or VelocityLab apps by streaming real time data from it's multiple sensors to your iOS, Android, ChromeBook, or Windows device where you can view, graph, record, and save data as a spreadsheet. This version of the PocketLab is great for physical science, weather and climate studies, engineering projects and more.

The PocketLab Voyager includes an optical range finder that works from as low as 10cm and all the way up to 2 meters, and is perfect for measuring the speed and position of moving objects like physics carts or falling objects. Additionally, the PocketLab Voyager has on board memory to store 30,000 data points. This can be used for situations where your device is out of range of the module like weather balloons, high altitude rockets, underwater devices, or installed at a remote weather station.

INCLUDES

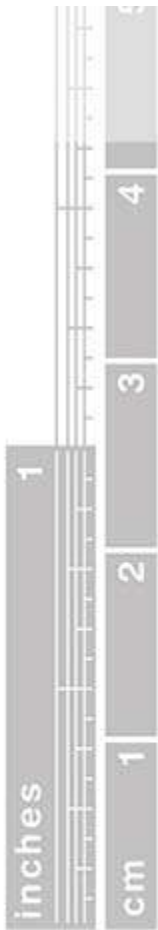
- 1x PocketLab Voyager
- 1x Carrying Case
- 1x USB Cable
- 1x Getting Started Guide
- 1x PocketLab Sticker

FEATURES

- Wireless Connection: Bluetooth 4.0
- Battery: Rechargeable via micro USB
- Battery Life:
 - 8hrs (wireless, full data rate)
 - 12hrs (low power, logging mode)
- Wireless Range: 250 feet line-of-sight
- Memory: 30,000 data readings
- Durability: 2m (6ft) drop protection
- Dimensions: 3.8cm x 3.8cm x 1.5cm (1.5in x 1.5in x 0.6in)
- Weight: 17g (0.6oz)
- Accelerometer
 - Range: $\pm 16g$
 - Resolution: 0.008g @ 94Hz
 - Data Rate:
 - 50 samples/sec (real-time)
 - 200 samples/sec (coming soon in burst mode)
- Gyroscope
 - Range: ± 2000 deg/sec
 - Resolution: 0.1 deg/sec @ 92Hz
 - Data Rate:
 - 50 samples/sec (real-time)
 - 200 samples/sec (coming soon in burst mode)
- Magnetometer
 - Range: $\pm 4800\mu T$
 - Resolution: 0.15 μT
 - Data Rate: 50 samples/sec
- Barometric Pressure
 - Range: 30 - 180kPa
 - Pressure Resolution: 1.3Pa
 - Absolute Accuracy: 0.1kPa
- Humidity
 - Range: 0-100%RH
 - Resolution: 0.02%RH
 - Absolute Accuracy: 3%RH
- Light
 - Range: 0.01 - 64,000 Lux
 - Spectrum: 400nm - 1000nm (Visible light)
 - Data Rate: 30 samples/sec
- Altitude
 - Range: -5,300m - 9,500m (-17,400ft - 31,000ft)
 - Resolution: 11cm (4in)

- Absolute Accuracy: 10m (33ft)
 - Data Rate: 50 samples/sec
- Ambient Temperature
 - Range: -40C - 85C (-40F - 185F)
 - Resolution: 0.01 C (0.02 F)
 - Absolute Accuracy: 0.5C (0.9F)
- IR Range
 - Range: 2m typical, 1.5m minimum (indoors)
 - Resolution: 1cm (0.4in)
 - Absolute Accuracy: 5% of reading
 - Data Rate: 33 samples/sec
 - Field of View: 25 degrees





<https://www.sparkfun.com/products/15012> 10-29-18