



Pixy 2 CMUcam5 Smart Vision Sensor

SKU 102991074

Pixy2 is the second version of Pixy. It's faster, smaller and more capable than the original Pixy, adding line tracking/following algorithms as well as other features.

Here's what we've added to Pixy2:

- Pixy2 detects lines, intersections and small barcodes, intended for line-following robots
- Improved framerate – 60 frames-per-second
- Tracking algorithms have been added to color-based object detection
- Improved and simplified libraries for Arduino, Raspberry Pi and other controllers
- Integrated light source

And of course, Pixy2 does everything that the original Pixy can do:

- Small, fast, easy-to-use, low-cost, readily-available vision system
- Learns to detect objects that you teach it
- Connects to Arduino with included cable. Also works with Raspberry Pi, BeagleBone and similar controllers
- All libraries for Arduino, Raspberry Pi, etc. are provided
- C/C++ and Python are supported
- Communicates via one of several interfaces: SPI, I2C, UART, USB or analog/digital output
- Configuration utility runs on Windows, MacOS and Linux
- All software/firmware is open-source GNU-licensed
- All hardware documentation including schematics, bill of materials, PCB layout, etc. are provided

Typical Functions Overview

- Seven color signatures
- Hundreds of objects
- Teach it the objects you're interested in
- Pixy2 "tracks" each object it detects
- color code
- Detecting and tracking lines
- Detecting Intersections and "branching"

Give Me More Info

Part List

Pixy 2 CMUcam5 Image Sensor	1
FC-10P to FC-6P Cable	1
Screw Package	1

ECCN/HTS

ECCN	6A993
HSCODE	9031900090

Technical Details

Dimensions	42mm x 38mm x 15mm
Weight	G.W 20g N.W 10g
Battery	Exclude
Processor	NXP LPC4330, 204 MHz, dual core
Image sensor	Aptina MT9M114, 1296×976 resolution with integrated image flow processor
Lens field-of-view	60 degrees horizontal, 40 degrees vertical
Power consumption	140 mA typical
Power input	USB input (5V) or unregulated input (6V to 10V)
RAM	264K bytes
Flash	2M bytes
Available data outputs	UART serial, SPI, I2C, USB, digital, analog
Integrated light source, approximately 20 lumens	

