

Localization Cape Manual

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Chapter 1

Localization Cape Requirements

1.1 Power Requirements

1.1.1 Pocket Beagle

Should be the same as the BeagleBone Black. Minimum recommended is 5V @ 1.2A, recommended is 5V @ 2A, which includes room for USB peripherals. See: <http://beagleboard.org/support/faq>

The actual usage by the BeagleBone Black measured during a test done by Adafruit saw current usage of less than 500mA. Which makes sense since it can operate as a USB device. See: <https://learn.adafruit.com/embedded-linux-board-comparison/power-usage>. It might actually be lower since there everything is integrated on the pocket beagle.

1.1.2 ELP VGA USB Camera Module

According to the specs available on Amazon this camera doesn't exceed 160mA of power usage. See: https://www.amazon.com/gp/product/B01DRG250Q/ref=oh_aui_search_detailpage?ie=UTF8&psc=1. Since they are USB Devices we can expect no more than 5V @ 500mA.

1.1.3 Dynamixel XL-320

See: <http://www.robotis.us/dynamixel-xl-320/> and 6 8.4V