

## Ardunit

The ardunit class is initiated with three parameters COM port, bauderate, and identifier.

*Example: ardunit("COM3", 57600, "slot11")*

**The COM** (string) port required for a specific arduino is the outdirection port that can be located after the device has been paired. (NOTE: the format of com ports differ greatly among operating systems the "COM-X-" notation is for windows only)

**The bauderate** (integer) is specific to the arduino unit, and is per default 9300 on HC-06 units (according to specification). However the lab units that have been able to connect use 57600, for some unknown reason.

**The identifier** (string) does not need to be meaningful if only a single arduino is to be created, however some unique identifier is required if a network (ardnet) is established.

Methods:

get\_temp():

Method to aquire temperature in celcius, return float

get\_vl()

Method to aquire visual light, returns float

get\_ul()

Method to aquire ultraviolet light, returns float

get\_rh()

Method to aquire relative humidity, returns float

## Ardnet

The ardnet class is used to manage the abstract data of an arduino network. The ardnet does not have constructor arguments. The "locations" referenced in the methods below is some identifier string used to associate a given measurement to the location of the unit

Methods:

new\_arduino(port,bauderate,position):

Add a new arduino to the network, returns ardunit object, for arduino constructor arguments, see class above

get\_temperature((string) location)

Method to aquire temperature in celcius of "location", return float

get\_visual\_light((string) location)

Method to aquire visual light of "location", returns float

`get_ultraviolet((string) location)`

Method to aquire ultraviolet light of "location", returns float

`get_relative_humidity((string) location)`

Method to aquire relative humidity of "locations", returns float

`list_all()`

Returns a string list all arduino units identifiers



