labequipment

Release 0.0.1

Aug 04, 2023

Contents

CHAPTER 1

Arduino Sketches for Lab Equipment

Python code for all the different bits of lab kit

1.1 Shaker Arduino Sketch

class labequipment.arduino.**Arduino**(*settings*, *timeout=0*, *write_timeout=0*)

Bases: object

choose_port(*os='linux'*)

flush()

Clears the buffer.

ignorelines(*n*)

quit_serial()

Close the serial port

read_all()

read_serial_bytes(*no_of_bytes*)

Read a given no_of_bytes from the serial port

read_serial_line()

Waits for data in the input buffer then reads a single line from the serial port.

Outputs: text the data from serial in unicode

readlines(*n*)

send_serial_line(*text*)

Send a string over the serial port making sure it ends in a new line .

Input: text the string to be sent to the arduino

labequipment.arduino.**find_port**()

CHAPTER 2

Lab Equipment

Python code for all the different bits of lab kit

2.1 Arduino

class labequipment.arduino.**Arduino**(*settings*, *timeout=0*, *write_timeout=0*)

Bases: object

choose_port(*os='linux'*)

flush()

Clears the buffer.

ignorelines(*n*)

quit_serial()

Close the serial port

read_all()

read_serial_bytes(*no_of_bytes*)

Read a given no_of_bytes from the serial port

read_serial_line()

Waits for data in the input buffer then reads a single line from the serial port.

Outputs: text the data from serial in unicode

readlines(*n*)

send_serial_line(*text*)

Send a string over the serial port making sure it ends in a new line .

Input: text the string to be sent to the arduino

labequipment.arduino.**find_port**()

2.2 Lauda Water Bath

class labequipment.lauda.**Lauda**(*port*)
Bases: sphinx.ext.autodoc.importer._MockObject

read_current_temp()

set_pumping_speed(*val*)

set_temp(*new_temp*)

start()

stop()

2.3 Omega Temperature and Humidity Sensor

class labequipment.omega_temperature_probe.**Probe**(*port='/dev/serial/by-id/usb-Omega_Engineering_RH-USB_N13012205-if00-port0'*)
Bases: sphinx.ext.autodoc.importer._MockObject

get_relative_humidity()

get_temp_C()

2.4 Shaker

2.5 Stepper

CHAPTER 3

Indices and tables

- genindex
- modindex
- search

Python Module Index

l

Index