
pyrealtime Documentation

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CHAPTER 1

Indices and tables

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`pyrealtime.decode_layer.comma_decoder(data)`

A simple parser that splits data by commas

Parameters `data` (*string*) – data to parse

Returns numpy array of floats

Return type `np.ndarray`

class `pyrealtime.serial_layer.ByteSerialReadLayer(*args, num_bytes=1, preamble=None, **kwargs)`

class `pyrealtime.serial_layer.SerialReadLayer(baud_rate, device_name, *args, auto_reconnect=True, **kwargs)`

Reads data from a serial port

Parameters

- **baud_rate** – Baud rate or serial port (e.g. 9600, 115200, etc). See pyserial documentation for more details
- **device_name** – Full or partial name of the device (e.g. 'COM2' or 'Arduino'). The port will be obtained using `find_serial_port()`.

classmethod `from_port(serial, *args, **kwargs)`

Creates a layer from an existing serial object

Parameters `serial` – Serial port object, either created using pyserial or from `find_serial_port()`.

class `pyrealtime.serial_layer.SerialWriteLayer(port_in, baud_rate, device_name, *args, auto_reconnect=True, **kwargs)`

Sends data to a serial port

Parameters

- **port_in** – Source of data to send
- **baud_rate** – Baud rate or serial port (e.g. 9600, 115200, etc). See pyserial documentation for more details

- **device_name** – Full or partial name of the device (e.g. ‘COM2’ or ‘Arduino’). The port will be obtained using `find_serial_port()`.

classmethod from_port (*port_in*, *serial*, **args*, ***kwargs*)

Creates a layer from an existing serial object

Parameters **serial** – Serial port object, either created using pyserial or from `find_serial_port()`.

`pyrealtime.serial_layer.find_serial_port` (*name*)

Utility function to scan available serial ports by name. The returned object is intended to be passed to the `from_port()` constructor of `SerialReadLayer` or `SerialWriteLayer`.

Parameters **name** – The name of the serial port to scan for. It will return the first available port containing name.

Returns A closed serial port object

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