

# Python Serial Communication (pyserial)

Python 3.x 3.0–3.5, Python 2.x 2.7

## Examples

### Check what serial ports are available on your machine

To get a list of available serial ports use

```
python -m serial.tools.list_ports
```

at a command prompt or

```
from serial.tools import list_ports
list_ports.comports() # Outputs list of available serial ports
```

from the Python shell.

### Initialize serial device

```
import serial
#Serial takes these two parameters: serial device and baudrate
ser = serial.Serial('/dev/ttyUSB0', 9600)
```

### Read from serial port

Initialize serial device

```
import serial
#Serial takes two parameters: serial device and baudrate
ser = serial.Serial('/dev/ttyUSB0', 9600)
```

to read single byte from serial device

```
data = ser.read()
```

to read given number of bytes from the serial device

```
data = ser.read(size=5)
```

to read one line from serial device.

```
data = ser.readline()
```

to read the data from serial device while something is being written over it.

```
#for python2.7
data = ser.read(ser.inWaiting())

#for python3
ser.read(ser.inWaiting())
```

## Syntax

```
ser.read(size=1)
```

```
ser.readline()
```

```
ser.write()
```

## Parameters

parameter	details
port	Device name e.g. /dev/ttyUSB0 on GNU/Linux or COM3 on Windows.
baudrate	baudrate type: int default: 9600 standard values: 50, 75, 110, 134, 150, 200, 300, 600, 1200, 1800, 2400, 4800, 9600, 19200, 38400, 57600, 115200

## Remarks

For more details check out [pyserial documentation](#)