

This page is also available in **2 other languages** [Change language](#)

English

## LANGUAGE

### FUNCTIONS

#### VARIABLES

#### STRUCTURE

#### LIBRARIES

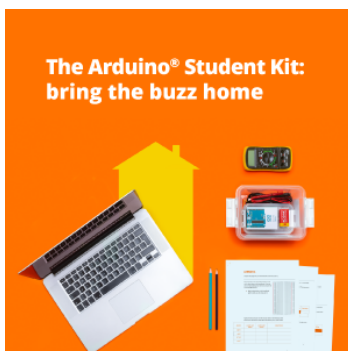
#### IOT CLOUD API

#### GLOSSARY

The Arduino Reference text is licensed under a [Creative Commons Attribution-Share Alike 3.0 License](#).

Find anything that can be improved? [Suggest corrections and new documentation via GitHub](#).

Doubts on how to use Github? Learn everything you need to know in [this tutorial](#).



Last Revision: 2019/02/21

Last Build: 2021/10/13

[EDIT THIS PAGE](#)

Reference > Language > Functions > Communication > Serial > Read

# Serial.read()

## Description

Reads incoming serial data.

`Serial.read()` inherits from the [Stream](#) utility class.

## Syntax

`Serial.read()`

## Parameters

*serial*: serial port object. See the list of available serial ports for each board on the [Serial main page](#).

## Returns

The first byte of incoming serial data available (or -1 if no data is available).  
Data type: `int`.

## Example Code

```
int incomingByte = 0; // for incoming serial data

void setup() {
  Serial.begin(9600); // opens serial port, sets data rate to 9600 bps
}

void loop() {
  // send data only when you receive data:
  if (Serial.available() > 0) {
    // read the incoming byte:
    incomingByte = Serial.read();

    // say what you got:
    Serial.print("I received: ");
    Serial.println(incomingByte, DEC);
  }
}
```

Help

