

## DATA SHEET

Code: ESP-WROOM-02

## WI-FI MODULE **ESP-WROOM-02** ESP8266EX Espressif

The ESP-WROOM-02 Wi-Fi module is a perfect complement to devices and systems based on popular microcontrollers (such as Arduino). This module allows you to extend the capabilities of devices with wireless communication - both working as a client and as an access point.

In addition, the processor present on the board, apart from supporting the Wi-Fi module, can perform other tasks, thanks to which the module can be used as an independent microcontroller with wireless connectivity. The integrated 4 MB Flash memory will also help in using the additional capabilities of the controller. Everything can be programmed via the appropriate USB -> UART 3.3V interface using the Arduino IDE or Eclipse IDE environment.

**Attention!** During programming and using the module, pay attention to the voltage levels of the logic circuits. The module has been designed for use with a voltage of 3.3  $V_{\rm DC}$  both on the supply side of the device and in the logical layer. Supplying 5  $V_{\rm DC}$  voltage to the inputs may cause permanent damage to the module.



Supported standards:	IEEE 802.11 b/g/n
Processor:	ESP8266EX
Operation modes:	Station / Soft AP / Station + Soft AP
Antenna type:	Indoor
Interface:	UART 3.3 V, SDIO, HSPI, I2C, I2S, GPIO, IR Remote Control, PWM
Frequency range:	2.4 GHz
Receiver sensitivity:	• 11b 11M : -91 dBm • 11g 54M : -75 dBm • 11n MCS7 : -72 dBm
Security measures:	WEP / TKIP / AES, WPA-PSK/WPA2-PSK
Operation temp:	-40 °C 85 °C
Weight:	0.001 kg
Dimensions:	20 x 18 x 2.8 mm
Manufacturer / Brand:	Espressif
Guarantee:	2 years