

Code: ESP-12F

## WI-FI MODULE **ESP-12F** ESP8266 Espressif

The ESP-12F 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<sub>DC</sub> both on the supply side of the device and in the logical layer. Supplying 5 V<sub>DC</sub> voltage to the inputs may cause permanent damage to the module.



Supported standards:	IEEE 802.11 b/g/n/e/i
WiFi chipset:	ESP8266
Operation modes:	Station / Soft AP / Station + Soft AP
Antenna type:	Indoor
Interface:	UART 3.3 V, SDIO, SPI, I2C, I2S, GPIO, ADC, PWM
Frequency range:	2.4 GHz
Receiver sensitivity:	<ul style="list-style-type: none"> <li>• 11b 11M : -91 dBm</li> <li>• 11g 54M : -75 dBm</li> <li>• 11n MCS7 : -72 dBm</li> </ul>
Security measures:	WEP / TKIP / AES, WPA-PSK/WPA2-PSK
Operation temp:	0 °C ... 40 °C
Weight:	0.001 kg
Dimensions:	24 x 16 x 3.2 mm
Manufacturer / Brand:	Espressif
Guarantee:	2 years