

DATA SHEET

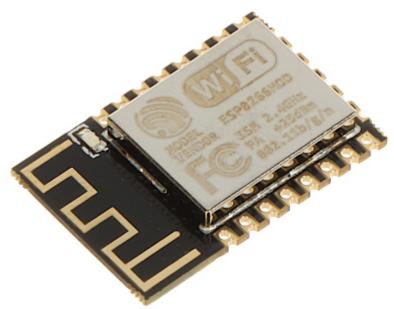
Code: ESP-12F

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 $V_{\rm DC}$ 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/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:	• 11b 11M : -91 dBm • 11g 54M : -75 dBm • 11n MCS7 : -72 dBm
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