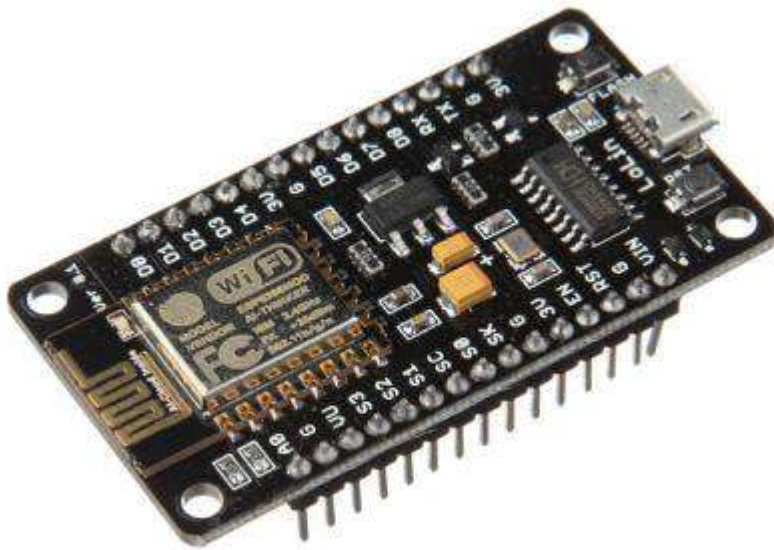


NodeMCU ESP-12E ESP8266 WiFi Lua IoT CH340



The NodeMcu is an open-source firmware and development kit that helps you to prototype your IoT product with few Lua script lines. The Development Kit based on ESP8266, integrates GPIO, PWM, IIC, 1-Wire and ADC all in one board.

Product Information	
dipmicro Code	DE5118
Added	03/04/2016
Manufacturer	Generic
Stock Type	New from manufacturer
Restockable?	No
Shipping Weight	10g / 0.353oz
Ship Cost Canada	CP O/S Letter C\$4

Ship Cost USA	USPS First Class \$4
Ship Cost World	Economy C\$5.00

Features

- Uses CH340G instead of CP2102.
- NodeMCU has built-in USB-TTL serial with super reliable industrial strength CH340G for superior stability on all supported platforms.
- Communication interface voltage: 3.3V.
- Antenna type: Built-in PCB antenna is available.
- Wireless 802.11 b/g/n standard
- WiFi at 2.4GHz, support WPA / WPA2 security mode
- Support STA/AP/STA + AP three operating modes
- Built-in TCP/IP protocol stack to support multiple TCP Client connections (5 MAX)
- D0 ~ D8, SD1 ~ SD3: used as GPIO, PWM, IIC, etc., port driver capability 15mA
- AD0: 1 channel ADC
- Power input: 4.5V ~ 9V (10VMAX), USB-powered
- Current: continuous transmission: ≈70mA (200mA MAX), Standby: <200uA
- Transfer rate: 110-460800bps
- Support UART / GPIO data communication interface
- Remote firmware upgrade (OTA)
- Support Smart Link Smart Networking
- Working temperature: -40 °C ~ + 125 °C
- Drive Type: Dual high-power H-bridge driver
- ESP8266 has IO Pin
- Don't need to download resetting
- A great set of tools to develop ESP8266
- Flash size: 4MByte

Usage

You need to power the board with external power supply. I used 5V/GND from Arduino powered by 12V/1A adapter on VIN/G on NodeMCU bottom left (USB facing down) - because that is what I had readily available on my desk when testing a batch of samples. Some units may work without external power, other may not even come up as serial port, some may cycle between serial port appearing and disappearing. NodeMCU does not have large power draw, but power surges from it's own working are most likely resetting the device. Some people have had success installing additional electrolytic capacitor on the device.

Installation

We receive these boards programmed with AT firmware and we reflash them with NodeMCU Lua firmware as a connectivity test. If you ever need to reflash again or upgrade we use [esptool](#), download [firmware](#) and issue following command like this (change serial port and firmware file as needed):

```
esptool.py -p COM3 write_flash 0x000000 "nodemcu_float_0.9.6-dev_20150704.bin"
```

In case you want original AT firmware, you can download it [here](#).

