Login (http://kmpelectronics.eu/Products/ProDinoWiFi-ESP/tabid/282/ctl/Login/language/en-US/Default.aspx?returnurl=%2fenus%2fproducts%2fprodinowifi-esp.aspx)

Register (http://kmpelectronics.eu/Products/ProDinoWiFi-ESP/tabid/282/ctl/Register/language/en-US/Default.aspx?

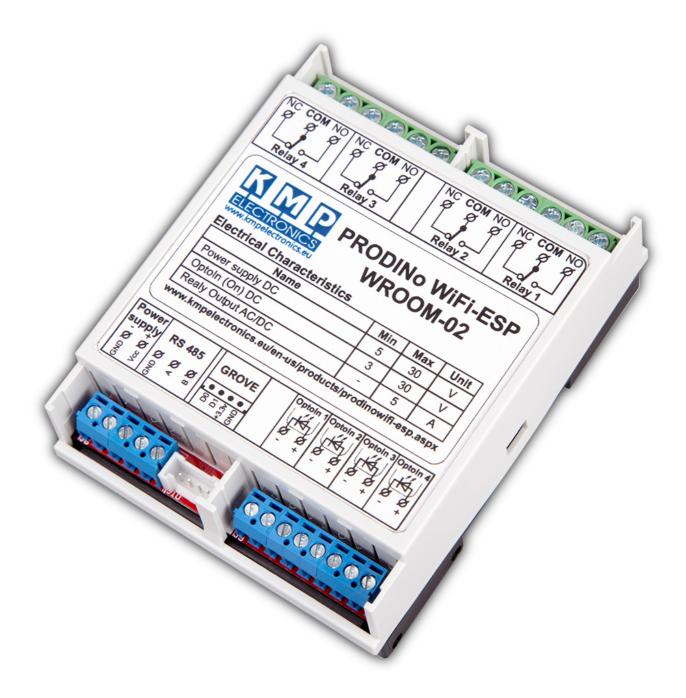
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Menu

(http://kmpelectronics.eu/en-us/home.aspx)

Products (http://www.kmpelectronics.eu/en-us/products.aspx) > ProDino WiFi-ESP (http://www.kmpelectronics.eu/en-us/products/prodinowifi-esp.aspx)

## PRODINo WiFi-ESP WROOM-2 V1.0



PRODINo WiFi-ESP WROOM-02 V1.0 is Arduino compatible Wi-Fi device powered by Espressif System's own ESP8266 WROOM-02 module with 4 MB Flash. The board enclosed in DIN rail compatible plastic box. The device is Arduino compatible.

## **Target Application**

- Internet of thinks IoT
- Home Automation
- WiFi WEB Relay Control
- WiFi WEB optical inputs check
- Remote relay control
- Data Collection to WEB Data Base
- Temperature WEB Monitor
- Connect with MQTT server

### **Features**

- Wi-Fi module Espressif ESP8266 WROOM-02
- 4 MB Flash
- 2 x GROVE connectors 1 external and 1 internal

- 1 x UEXT internal connector
- 4 Relay Outputs
- 4 Optical Isolated Inputs
- RS485 port
- Switching Regulator power supply
- Arduino compatible

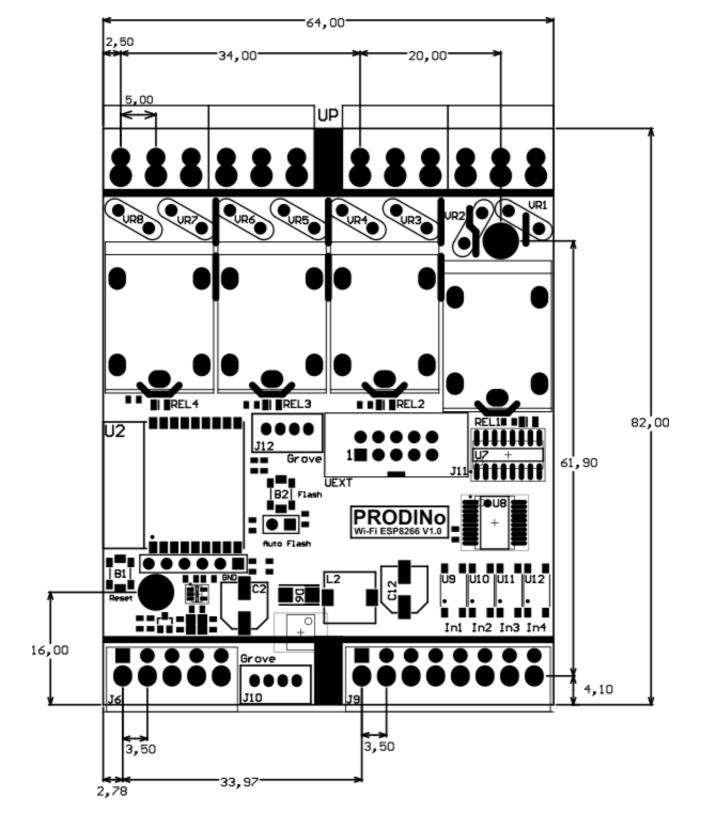
## **Specifications**

Name	Min	Max	Unit
Power supply DC	5	30	V
OptoIn (On)	1,5	30	V
Relay output AC/DC	-	250	V
Relay output AC/DC	-	5	Α

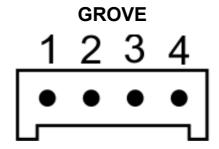
## Box dimensions (in mm)

Width	Height	Length
70	32	92

## **Board dimensions (in mm)**



### **Expansion Connectors**

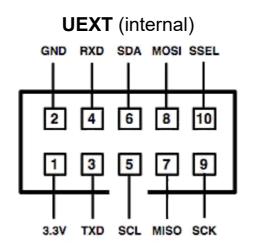


### External **J10** Grove Digital

Pin		ESP pin	Description
1	EXT_GROVE_D0	5	Primary digital Input/Output It is same for J12 INT_GROVE_D1
2	EXT_GROVE_D1	4	Secondary digital Input/Output
3	Vcc		Power for Grove module 3,3 V
4	GND		Ground

## Internal J12 Grove Mixed (Analog/Digital)

Pin		ESP pin	Description
1	INT_GROVE_A0	A0	Primary analog Input/Output (the value is divided 2)
2	INT_GROVE_D1	4	Secondary digital Input/Output It is same for J10 EXT_GROVE_D0
3	Vcc		Power for Grove module 3,3 V
4	GND		Ground



Pin	Name	ESP pin	Description
1	3.3V		+3.3 volt

2	GND		Ground
3	TXD	TXD	Transmit Data for Async Serial bus
4	RXD	RXD	Receive Data for Async Serial bus
5	SCL	GPIO5/SCL	Clock for I2C bus
6	SDA	GPIO4/SDA	Bidirectional Serial Data for I2C bus
7	MISO	GPIO12/MISO	Serial Data In for SPI bus
8	MOSI	GPIO13/MOSI	Serial Data Out for SPI bus
9	SCK	GPIO14/SCLK	Clock for SPI bus
10	SSEL	GPIO2/CS	Slave Select for SPI bus

# **Electrical specification**

The power consumption measured on **Power supply** connector

Voltage	All Relays Off	All Relays On
5 V	0,080 A	0,300 A
12 V	0,040 A	0,150 A
24 V	0,022 A	0,083 A

Input	Consumption
1,5 V	0,3 mA
5 V	0,6 mA
12 V	1,0 mA
24 V	1,5 mA

#### **Pictures**

Gallery

#### See Also

Examples (/en-us/examples/prodinowifi-esp.aspx)

How to install board and examples (/en-us/examples/prodinowifi-esp/howtoinstall.aspx)

How to flash firmware on the device (/en-us/products/prodinowifi-esp/prodinowifi-espflashfirmware.aspx)

Download the Arduino Software (http://arduino.cc/en/Main/Software)

#### **Datasheets**

PRODINo WiFi-ESP WROOM-2 schematic (/Portals/0/Projects/PRODINoWiFiESP/PRODINo\_WiFi-ESPv1.0 Schematic.pdf)

ESP WROOM-2 (/Portals/0/Projects/PRODINoWiFiESP/ESP-WROOM-02.pdf)

Relay RAS-0515 (/Portals/0/Projects/DataSheet/RAS.pdf)

### You can buy from:

Prices are buying from us... (/en-us/products/prodinowifi-esp/prodinowifi-espprices.aspx)

- OR -



#### **Products**

PRODINo WiFi-ESP (/en-us/products/prodinowifi-esp.aspx)

ProDiNo Ethernet (/en-us/products/prodinoethernet.aspx)

Converter USB to RS458 (/en-us/products/converterusbtors458.aspx)

Future products (/en-us/products/futureproducts.aspx)

### **Customer Support**

PRODINo WiFi-ESP Examples (/en-us/examples/prodinowifi-esp.aspx)

Examples (/en-us/examples.aspx)

