



Name: **WiFi Relay Shield**

Code: **MR007-002.3**

The *WiFi Relay Shield* is an Arduino compatible module that provides an easy way to control high voltage thanks to 4 independent channels equipped with photo-coupled mechanical relays preassembled on the board. The maximum switching power is 1250VA AC or 150W DC.

The control of all the channels of this shield have to be done through the digital I/O pins 5, 6, 7 and 8 of the Arduino board where this shield is mounted on, anyway it is necessary an external 12VDC power source to correctly supply the relay coils. This 12V power supply can be taken directly from the Arduino Vin pin or connected to the terminal block.

The 12VDC power presence is pointed out by the switching on of the red led PWR placed next to the corresponding terminal block.

An important feature of this shield is the presence of the interface connector for the ESP8266 modules that allows you to communicate remotely via these wireless modules with the Arduino that houses the WiFi Relay Shield, making it simple to use this board in robotics applications, industrial controls and home automation.

During the programming of the Arduino board and in general during the serial communication between Arduino and PC, the presence of the ESP8266 module interferes with the signals of the serial port; for this reason it is necessary to remove the ESP8266 module from the shield during these phases.

**!!! CAUTION !!!**

**This device can carry high voltages and can therefore be deadly if incorrectly used.**

## CHARACTERISTICS

Name	Description
OUT-1 control pin	Arduino pin 8
OUT-2 control pin	Arduino pin 7
OUT-3 control pin	Arduino pin 6
OUT-4 control pin	Arduino pin 5
Supply voltage	12VDC
Supply current	200mA (max.)
Dimensions	69 x 55 mm (2.7" x 2.2")
Weight	49 gr (1.73 oz)
Operating temperature	-30 to +70 °C

## SPECIFICATIONS (each channel)

Name	Description
Rated voltage	30VDC, 250VAC
Rated current	5A
Coil voltage	12VDC
Coil resistance	320 $\Omega$ ±10%
Vita utile elettrica	100000 operations
Vita utile meccanica	10000000 operations
Tempo di eccitazione	10ms Max.
Tempo di rilascio	4ms Max

