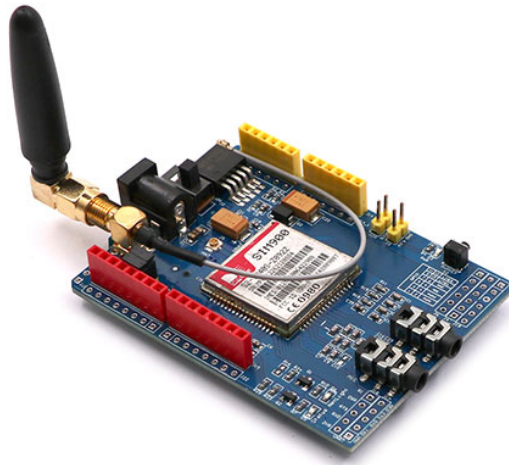


# ***GSM SIM900 Development Board***



## Overview

The GPRS Shield expansion board is a serial GSM/GPRS wireless module. Can learn GSM/GPRS mobile phone development, remote control equipment development, wireless meter reading, smart home appliances, ultra-long-distance control, etc.

GPRS Shield is compatible with all standard Arduino development boards. GPRS Shield is a 4-band GPRS/GSM module that supports 4 standard frequency bands 850 / 900 / 1800 / 1900 MHz at the same time. It is suitable for domestic and foreign applications. It can send SMS messages, make calls, GPRS and other functions that all mobile phones have.

## Features

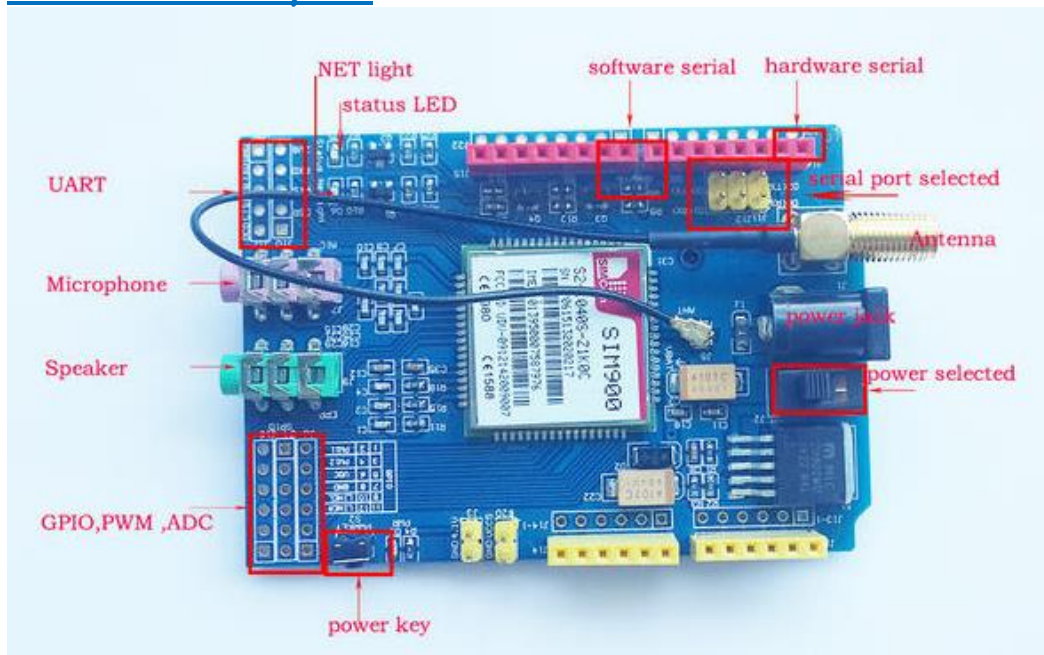
- Quad-Band 850 / 900 / 1800 / 1900 MHz - would work on GSM networks in all countries across the world.
- GPRS multi-slot class 10/8
- GPRS mobile station class B
- Compliant to GSM phase 2/2+
- Class 4 (2 W @ 850 / 900 MHz)
- Class 1 (1 W @ 1800 / 1900MHz)
- Control via AT commands - Standard Commands: GSM 07.07 & 07.05 | Enhanced Commands: SIMCOM AT Commands.
- Short Message Service - so that you can send small amounts of data over the network (ASCII or raw hexadecimal).
- Embedded TCP/UDP stack - allows you to upload data to a web server.
- RTC supported.
- Selectable serial port.
- Speaker and Headphone jacks

- Low power consumption: 1.5mA(sleep mode)
- Industrial Temperature Range: -40°C to +85 °C
- Size: 8.5x5.7x2cm(approx.)

### Application Ideas

- M2M (Machine 2 Machine) Applications.
- Remote control of appliances.
- Remote Weather station or a Wireless Sensor Network.
- Vehicle Tracking System with a GPS module.

### Interface Description



- ❖ Power select - select the power supply for GPRS shield(external power or 5v of Arduino)
- ❖ Power jack - connected to external 4.8~5VDC power supply
- ❖ Antenna interface - connected to external antenna
- ❖ Serial port select - select either software serial port or hardware serial port to be connected to GPRS Shield
- ❖ Hardware Serial - D0/D1 of Arduino
- ❖ Software serial - D7/D8 of Arduino
- ❖ Status LED - tell whether the power of SIM900 is on
- ❖ Net light - tell the status about SIM900 linking to the net
- ❖ UART of SIM900 - UART pins breakout of SIM900
- ❖ Microphone - to answer the phone call
- ❖ Speaker - to answer the phone call
- ❖ GPIO,PWM and ADC of SIM900 - GPIO,PWM and ADC pins breakout of SIM900
- ❖ Power key - power up and down for SIM900