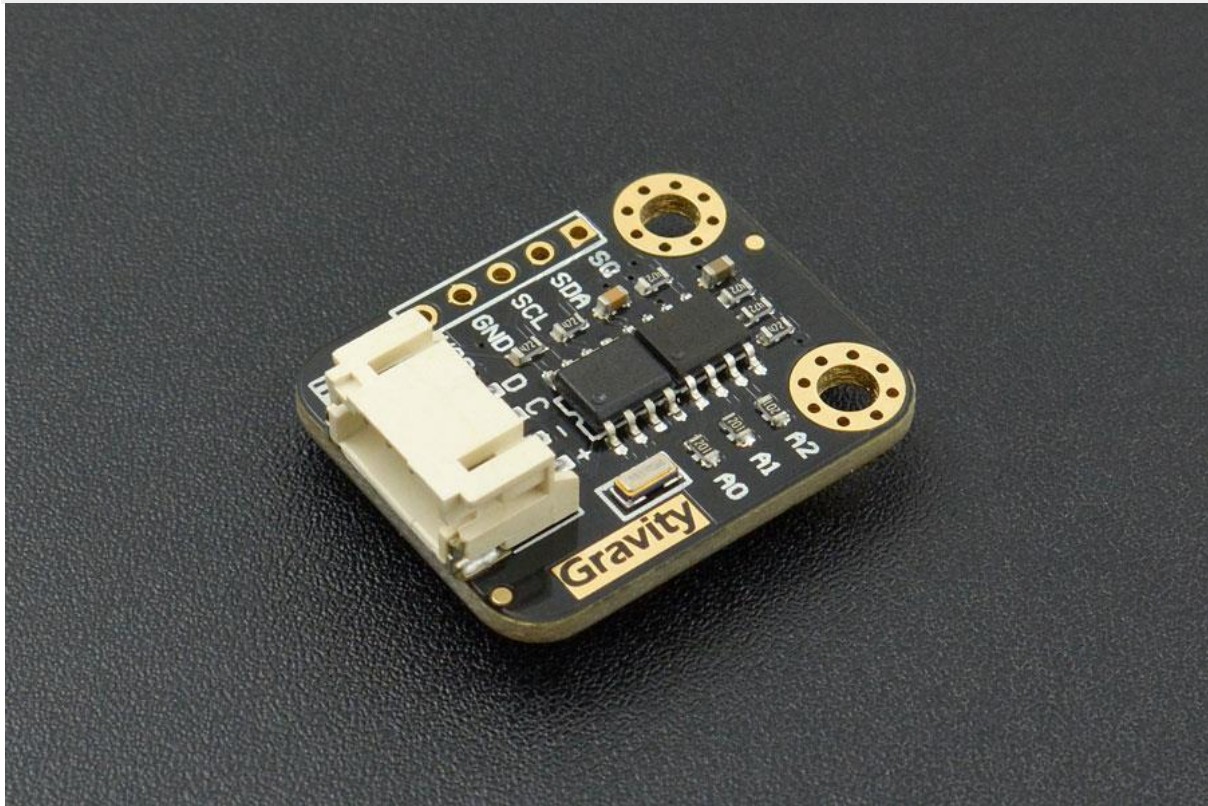# Gravity: I2C DS1307 RTC Module

SKU:DFR0151

INTRODUCTION

After several months of "Out of Stock", DS1307 RTC module has experienced a huge upgrade. It comes with a Gravity I2C interface.Its size is also reduced to fit miniaturization application. Gravity I2C DS1307 RTC module is a easy-to-use Real Time Clock module. It is cheap and affordable in most applications such as time clock, data logger, etc. The new version DS1307 RTC module adopts high precision crystal oscillator which reduces time error dramatically. The test conducted shows the time error is only about 1 second in 24 hours (the average time error of Mechanical Watches is about 20s). The module is powered by single cell CR1220 (service life: 3~5 years). It is smaller and keeps EEPROM 4KB ROM to record information related to alarm clocks and events. Besides, you can set the I2C address by resistance adjustment. The Gravity DS1307 RTC module uses Gravity I2C interface and you can plug it on the DFRobot Gravity IO expansion shield directly. Cooperate with Arduino DS1307 library developed by DFRobot, it is easy to realize functions like setting time and time display. It can be widely used in DA (Data Acquisition).

Note: According to the latest Air Transport Regulations, the batteries, magnets and liquids transport will be very stringent, so the cell battery CR1220 will not come with the module any more. Please buy it from the local supermarket.

SPECIFICATION

- Operating voltage: 5V

- Interface: I2C (Gravity PH2.0-4P Interface & XH2.54 Pins)

- IC Output Data: Hour, Minutes, Seconds, Week, Day, Month, Year

- Leap-year Compensation

- Accurate calendar up to year 2100

- 1Hz Output Pin

- 56 Bytes of Non-volatile memory available to user

- 4KB ROM of EEPROM

- Size: 0.81inch x 1.06inch (22mm x 27mm)

- Weight: 6g