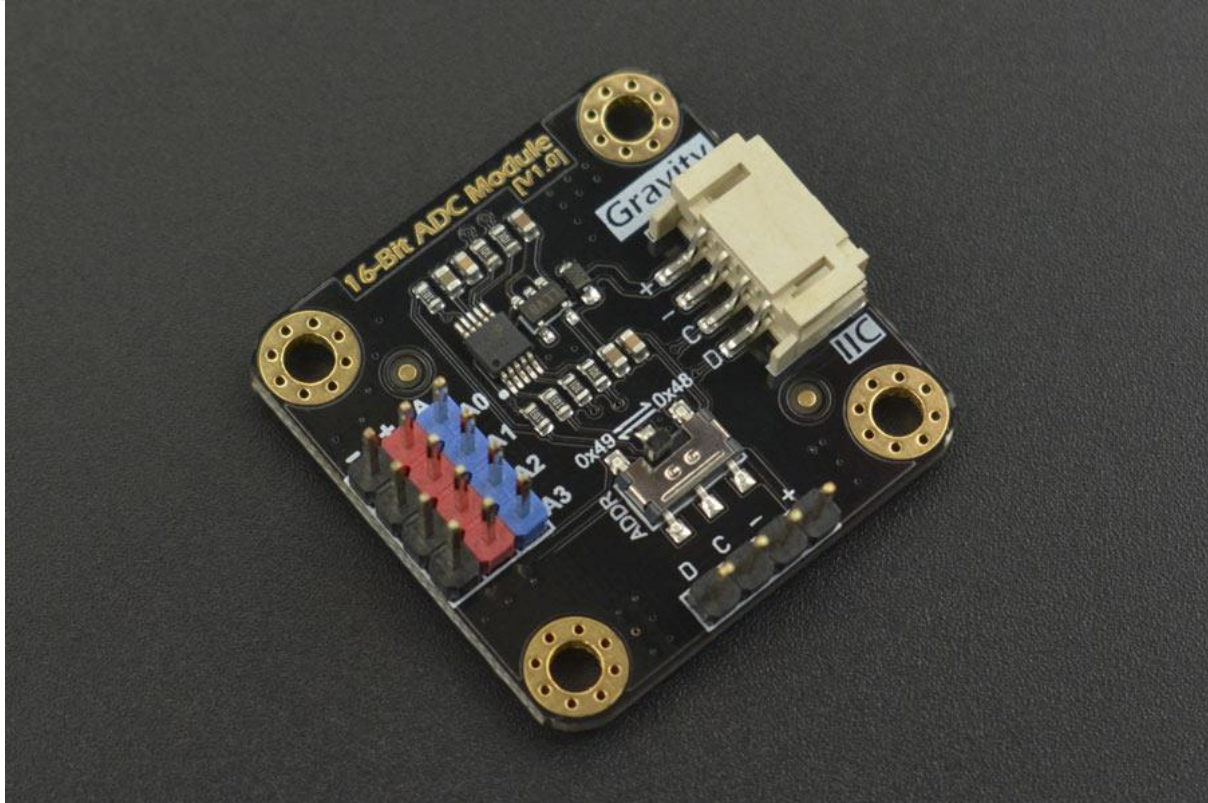




DFROBOT[®]
DRIVE THE FUTURE

Gravity: I2C ADS1115 16-Bit ADC Module (Arduino & Raspberry Pi Compatible)

SKU:DFR0553



INTRODUCTION

DFRobot I2C ADS1115 16-bit ADC module can accurately collect and convert analog signals. Through this ADC module, Raspberry Pi can easily use a wide range of Gravity series analog sensors to measure various signals, and perceive this world.

Raspberry Pi is a common master control board which is powerful in its functions, but the I/O pins of Raspberry Pi can read digital signals only, what's more, only through an external analog-to-digital conversion (ADC) module can it read signals of analog sensor or device, it is not convenient to use.

DFRobot I2C ADS1115 16-bit ADC module is specially designed for Raspberry Pi and Gravity series analog sensors, which greatly reduces the difficulty of using the Gravity series analog sensors, plug and play, no welding, very convenient. The number of Gravity series sensors is large and its wide variety can meet the needs of various sensors of the Raspberry Pi.

This module uses 16-bit ADC chip ADS1115, supports 3.3 ~ 5V wide voltage power supply. The chip has a precision reference voltage and programmable gain adjustment (PGA), therefore, accurate acquisition and conversion can be performed for both weak and highly variable signals. So it is also applicable to all types of applications that the main control board needs to accurately collect the analog signals.

One ADC module can read analog signals of 4 channels. Because of the on-board I2C address



DFROBOT[®]
DRIVE THE FUTURE

selection switch, it supports the cascade of two ADC modules and can read analog signals of 8 channels, it can satisfy the needs of various applications.

Attention:

The voltage on analog input pins must be less than $VCC+0.3V$!

FEATURES

- Support 3.3~5.0V Wide Supply Voltage
- 3.3V I2C digital level signal, optimized for Raspberry Pi
- Gravity I2C Interface, plug and play
- On-board I2C address selection switch, supports cascade of two ADC modules
- Color coded 3pin headers, plug and play with Gravity analog sensors

SPECIFICATION

- Supply Voltage (VCC): 3.3~5.0V
- Analog Signal Detection Range: 0~VCC
- Number of Analog Channels: 4
- ADC Bits: 16 Bit
- Operating Current: 2~3mA (Not include sensor module)
- Interface Type: Gravity I2C
- Interface Level: High 3.3V, Low 0V
- Product Size: 32mm * 32mm(1.26in*1.26in)