

GY-68 300-1100hPa BMP180 Temperature Sensor Module Atmospheric Pressure Sensor

Product Description

- Specifications:

Pressure range: 300~1100hPa (elevation of 9000 meters to -500 meters)

Power supply voltage: 1.8V~3.6V (VDDA), 1.62V~3.6V (VDDD)

Input voltage: 3.3V to 5.5V

Peak current : 1000uA

Maximum voltage at SDA , SCL : VCC + 0.3V

Operating temperature: -40°C to +80°C

Low power consumption: 5μA in standard mode

High precision: low power mode, the resolution of 0.06hPa (0.5m).In high linear mode, the resolution is 0.03hPa (0.25m)

MSL 1 reaction time: 7.5ms

Standby current: 0.1 A

No external clock circuit is required

LCC8 package: leadless ceramic carrier package (LCC)

Size: 3.6 x 3.8 x 0.93mm

- Pin Description:

VCC:Connected to +5V

GND:Connected to ground.

SDA:Serial Data pin (I2C interface)

SCL:Serial Clock pin (I2C interface)

3.3V:If +5V is not present. Can power module by connecting +3.3V to this pin.



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BMP180 is one of sensor of BMP XXX series. They are all designed to measure Barometric Pressure or Atmospheric pressure. BMP180 is a high precision sensor designed for consumer applications. Barometric Pressure is nothing but weight of air applied on everything. The air has weight and wherever there is air its pressure is felt. BMP180 sensor senses that pressure and provides that information in digital output. Also the temperature affects the pressure and so we need temperature compensated pressure reading. To compensate, the BM180 also has good temperature sensor.

BMP180 is a high precision, small size, low energy consumption pressure sensor. It can be used in mobile devices. Its performance is excellent, the absolute accuracy can achieve 0.03hPa (minimum), and low power consumption, only 3 μ A.

The BMP180 uses a powerful 8-pin ceramic leadless chip carrier (LCC) ultra thin package that can be directly connected to various microprocessors via the I2C bus.
- Typical applications:

GPS accurate navigation (dead reckoning, upper and lower bridge detection etc.)
Indoor and outdoor navigation
Leisure, sports and health care and other monitoring
Weather forecast
Vertical speed indicator (rising / sinking speed)
Fan power control

Package Include:

1 x 300-1100hPa BMP180 temperature module