

I2C PRESSURE SENSOR

GPT262

GAMICOS

INTRODUCTION

The GPT262 pressure sensor is a small general-purpose pressure transmitter newly developed by our company. It uses internationally advanced high-stability and high-precision chips, carefully built through more than a dozen advanced production processes, and undergoes temperature compensation, error and nonlinear signal adjustments. A new generation of products that guarantee high precision.

This product adopts I2C bus signal output, has the characteristics of low power consumption, strong anti-interference, and long transmission distance. The sensor is small in size, simple to install, and cost-effective, which greatly enhances the adaptability of the site.



FEATURES

- Low power consumption design, wide voltage 3.3V/5V, minimum current could be 5μA
- Fast power-on, the fastest data output response can reach 3ms
- I2C bus signal output, with unique features such as strong anti-interference and long transmission distance
- The minimum length can be 15mm, which can realize flexible installation and reduce costs
- Simply wiring and maintenance. Only two wires can achieve the communication between multiple sensors on one bus.
- Authentic multi-master bus data transmission. Data destroyed be avoid through conflict detection and arbitration, and ensure the safe transmission of data
- The digital compensation of sensor offset, sensitivity, temperature drift and non-linearity can ensure the high stability and high precision of the product.

APPLICATIONS

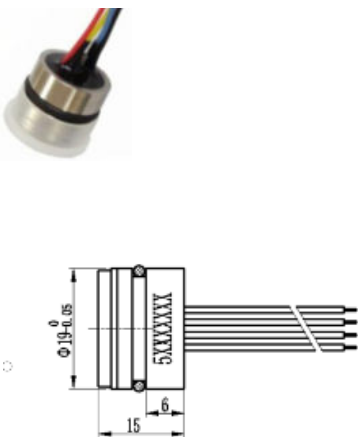
- Industrial control
- Smart medical
- Manufacturing
- Communication electronics
- Environmental monitoring
- Fire Safety

SPECIFICATION

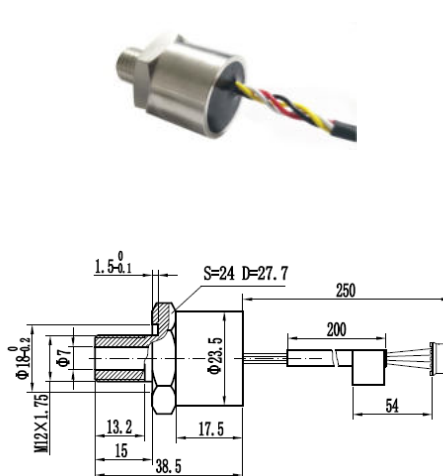
| | |
|---------------------------|---|
| Range | -100kPa...0kPa~10kPa...7MPa |
| Power Supply | 5V DC/3.3V DC |
| Working current | <1.3mA |
| Accuracy | ±0.5%FS (pressure) ±0.5°C (temperature) |
| Type of pressure | Gauge pressure, absolute pressure and sealed gauge pressure |
| Overload | 2 times full scale pressure |
| Compensation temperature | -10°C~80°C |
| Operating Temperature | -40°C~80°C |
| Storage Temperature | -40°C~+125°C |
| Response Time(10%~90%)m≤1 | ≤1ms |
| Diaphragm Material | 316L, titanium alloy optional |
| Long-term Stability | ±0.2%FS/Year |
| Protection Level | IP65 (IP68 customizable) |
| Shell Material | 304、316L |
| Insulation Resistance | MΩ500 (100VDC) |

DIMENSION

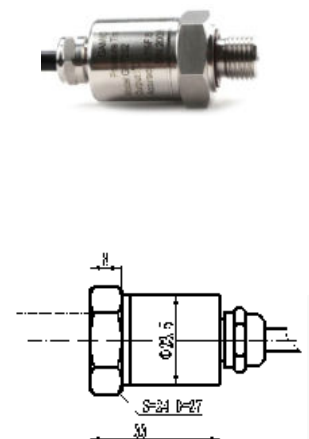
GPT262-C core type



GPT262-S threaded type



GPT262-I integrated type



ELECTRICAL CONNECTIONS



| Name | VCC | SCL | SDA | GND | Shell |
|-------------------|-----|--------|------|-------|-------|
| GPT262-I | Red | Yellow | Blue | green | black |
| GPT262-S/GPT262-C | Red | Yellow | Blue | black | |

ORDER GUIDE

| GPT262 | I2C Pressure Sensor | |
|--------|---------------------|-----------------------------|
| | Code | Range |
| | 0/X | -100kPa...0kPa~10kPa...7MPa |
| | Code | Type of pressure |
| | G | Gauge |
| | S | Sealed gauge pressure |
| | A | Absolute pressure |
| | Code | Power |
| | V1 | 3.3 VDC |
| | V2 | 5 VDC |
| | Code | Type |
| | C | Core |
| | S | Threaded |
| | I | Integrated |
| | Code | Pressure interface |
| | P1 | M20X1.5 |
| | P2 | G1/4 |
| | P3 | 1/4''NPT |
| | P4 | 1/2''NPT |
| | P5 | Customizable |