

## CAN总线压力传感器

## CAN Bus pressure sensor

## CY-006系列

本传感器是将敏感元件输出的弱小信号，经信号调理电路进行放大，然后经过A/D转换将模拟电压变成数字信号，并送入单片机进行处理。单片机将处理后的结果，通过CAN控制器，转变成符合CAN协议的数据流，经光耦隔离，再由CAN收发器执行接收发送任务。传感器采用了CAN总线通讯方式，提高了数据传输的实时性和可靠性，满足了型号发展对智能传感器的需求。

性能指标：

- (1) 具有温度补偿和非线性修正能力
- (2) 全温区精度高： $\leq 0.2\%$  (  $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$  )
- (3) 零点和满量程可调
- (4) 具有自诊断能力，可提供故障信息
- (5) 可同时输出压力和温度参数
- (6) 数字量输出，符合CAN2.0协议标准，减少传输误差
- (7) 电子标签，便于管理
- (8) 可降低电缆网复杂程度和测试成本，提高可靠性和可维修性

The output weak signal of sensitive element is amplified by the signal conditioning circuit, convert simulation voltage into a digital signal through A/D conversion, and then send to the single chip microcomputer for processing. Treated result is converted into data flow accord with the CAN protocol by CAN controller, with the optical coupling isolation, the CAN transceiver receive and send missions. Adopting the CAN bus communication, sensor improve the real-time performance and reliability of data transmission, meet the needs of the development of intelligent sensor model.

Performance Index:

- (1) with ability of temperature compensation and nonlinear correction.
  - (2) All the zones of high precision:  $\leq 0.2\%$  (  $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$  )
  - (3) Zero and full range is adjustable
  - (4) It has the diagnosis ability, can provide fault information
  - (5) output pressure and temperature parameters at same the time
  - (6) Digital output, accord with CAN2.0 protocol standard, reduce the transmission error
  - (7) Electronic tags, easy to manage
  - (8) It can reduce cable network complexity and test cost, improve the reliability and maintainability
- Product appearance figure and picture

