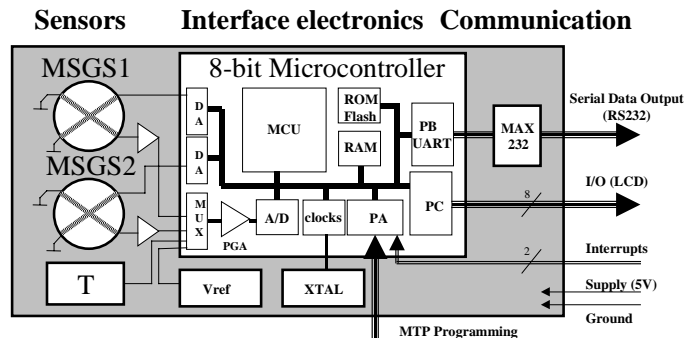


MGSM3000

Gas Sensing Module with two MSGS3000 Gas Sensors



Special Features

- Detection of CO, CH₄, NO_x, Hydrocarbons and VOC (Volatile Organic Components)
- Operates two semiconductor gas sensors and a temperature sensor
- Custom solutions for the selectivity using an application specific mode of operation
- Pre-calibrated module following a dedicated calibration procedure
- Easy field implementation with PC readout and on-site replacement
- Single supply, low power, small size

Product Description

Sensing principle	The sensitive element is a resistive metal oxide layer deposited on an integrated resistive heater. The detection of specific gases is based on a conductivity change of the sensing element at an appropriate temperature using a dedicated mode of operation
Interface electronics	The 8-bit microcontroller controls the mode of operation (DAC, timer), performs the data acquisition (PGA + 16 bits ADC), computes the data preprocessing and handles the data communication
Module dimension	45 mm x 31 mm x 18 or 8 mm (sensors with or without filters)

Characteristics

Input/Outputs	<p>Power supply: single 0-5V, current consumption max. 60 mA (depends on sensor operation)</p> <p>Data output with RS232 serial interface (8 bit data, 1200 bauds)</p> <p>10 I/O programmable bit (LCD driver, 2 external interrupts)</p> <p>On-site programmable for updating the mode of operation</p>
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Application

- Pre-calibrated module for portable systems
- Indoor air monitoring
- Environment monitoring
- Security, industrial process control