MinIR™ LED 5% to 100% CO2 Sensor

The MinIR™ CO2 sensor brings solid state electronics to NDIR CO2 sensors. MinIR™ uses LEDs to deliver ultra-low power and rugged/vibration-resistant performance. Combined with the MX board, it provides full-featured capability for industrial, scientific, engineering or OEM applications.

FEATURES

- Sensor measures up to 100% CO2
- MX Board includes Barometric Pressure, Temperature and % Relative Humidity Sensors
- MX Board adds RS485 Industry-standard Interface
- Easy Integration; Compact & Low Power

AVAILABLE MODELS

Development Kit – Easy to use, simply plug the MX Board into your PC via USB. Use our free GasLab® software to measure and graph carbon dioxide, barometric pressure, temperature, and % relative humidity. Includes on-board memory for data logging.

MX Board – Same functionality as the development kit without USB cable or software.

Sensor Only – for integration into high-volume OEM products.

SPECIFICATIONS

- CO2 Sensing Method: Non-dispersive infrared (NDIR) absorption
- Sample Method: Diffusion
- Measurement Range: 0-5%, 0-100%
- Accuracy: ±70 ppm +/- 5% of reading @ STP
- Accuracy @ 100% Range: ±300 ppm +/-5% of reading @ STP
- Non Linearity: < 1% of FS
- Operating Pressure Range: 950 mbar to 10 bar
    - req. external pressure calibration
- Pressure Dependence: 0.1% of reading per mbar @STP
- Warm-up Time: < 10s. 1.2 secs to first reading
- Response Time: 10 secs to 3 mins (Configurable)
- Reading refreshed twice per second (Configurable)
- Operating Conditions: 0°C to 50°C, 0 to 95% RH, non-condensing
- Dimensions: 25mm x 40mm x 31mm on PCB (LxWxH)
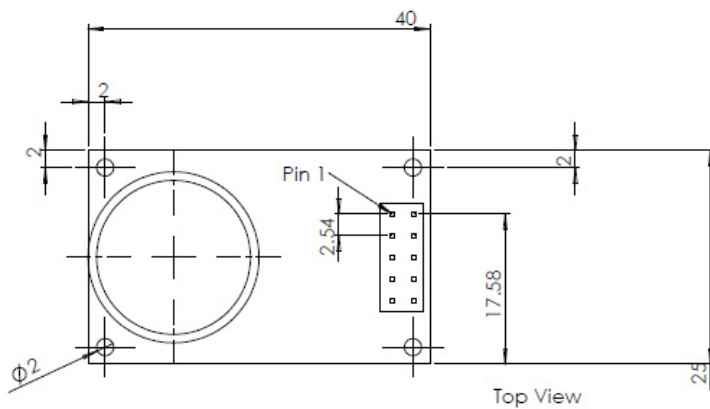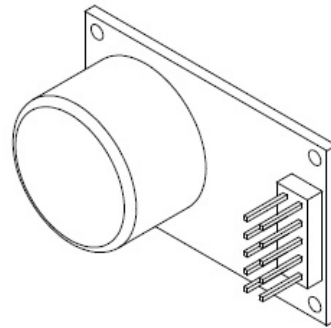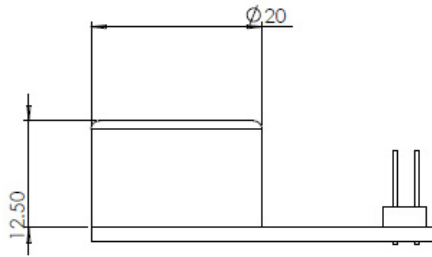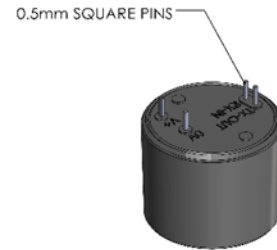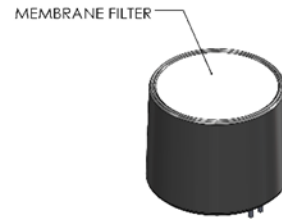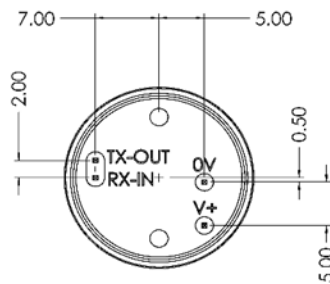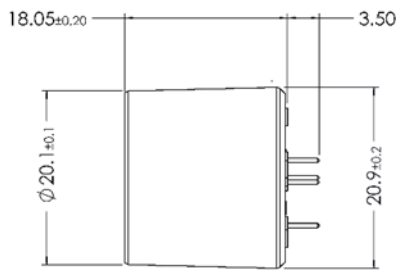- Weight: 16g sensor, 5.8g board

PART NO.

- **CM-40331**: 5% DevKit
- **CM-40330**: 5% MX Board
- **GC-0024**: 5% Sensor

- **CM-40831**: 100% DevKit
- **CM-40830**: 100% MX Board
- **GC-0025**: 100% Sensor

CO2Meter.com
CO2 Measurement Specialists

ELECTRICAL/MECHANICAL

- Power Input: 3.25 to 5.5V. (3.3V recommended)
- Peak Current: 33mA @ 2 readings/sec.
- Average Current: <1.5mA
- Power Consumption: 3.5mW @ 2 readings/sec.
- Interface: UART (Serial)

CONNECTION	DESCRIPTION	COMMENTS
0V	GND CONNECTION	0V
V+	POSITIVE POWER SUPPLY	3V3 TO 5V
Tx-OUT	UART Tx FROM SENSOR	Voh WILL BE 3V. SENSOR OUTPUT.
Rx-IN	UART Rx TO SENSOR	USED FOR CONFIGURATION

All dimensions
in millimeters

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