

ExplorIR[®]-W

- Flexible, small form-factor CO₂ sensor
- Ideal for battery-powered applications
- Fit and forget, fully autonomous operation
- Long life, >15 years



About the ExplorIR[®]-W

The ExplorIR[®]-W is a small footprint low power CO₂ sensor designed for applications where space is at a premium. The combination of small size, low power and high accuracy makes this sensor suitable for portable, battery powered personal safety equipment.

The ExplorIR[®]-W has a very wide dynamic range and is capable of measuring CO₂ gas concentrations up to 100%, without compromising measurement accuracy or responsiveness.

The sensor is designed to take 2 readings per second, making it ideal for applications where gas concentrations are rapidly changing. The ExplorIR[®]-W uses patented NDIR solid-state LED optical technology that delivers consistent and accurate CO₂ measurement performance over the lifetime of the sensor.

Features

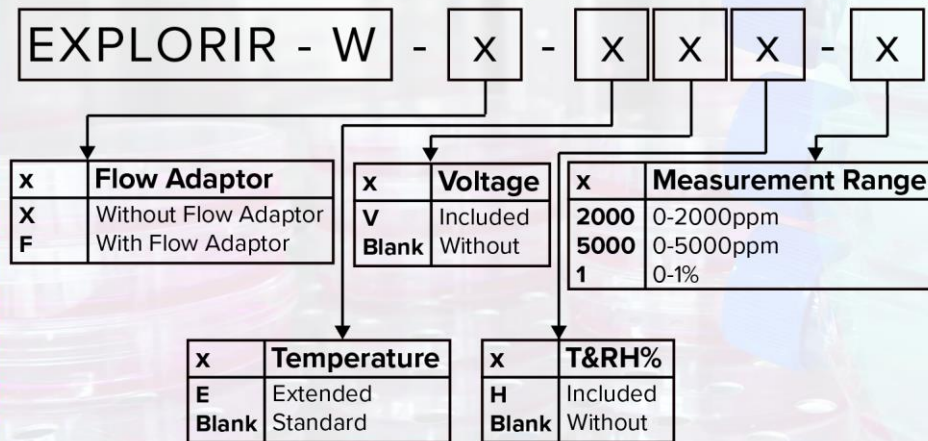
- Measures up to 100% CO₂ concentration
- Low power CO₂ sensor
- Solid state LED optical technology
- Vibration and shock resistant
- Optional temperature and relative humidity sensor
- UART data interface
- Built-in auto-zeroing
- Optional flow through adaptor
- Optional voltage output

Applications

- Industrial Safety
- Incubators
- Transportation
- Refrigeration
- Horticulture and Agriculture

Explor[®] IR - W

Ordering Information



CO₂ Sensor Specifications

| | |
|---------------------------------------|--|
| Measurement Ranges | 0-5%, 0-20%, 0-60%, 0-100% |
| Accuracy (typ.) | 0-60% ±(70ppm, +5% of reading) 0-100% ±(300ppm, +5% of reading) |
| Time to 1st Reading | <1.2 Seconds |
| Response Time | <30 Seconds (Diffusion Limited) |
| Readings per Second | 2 |
| Sample Method | Solid-state LED NDIR Diffusion |

Electrical and Mechanical Specifications

| | |
|---------------------------------|------------------------|
| Measurement Output | UART |
| Supply Voltage | 3.25V – 5.5V |
| Power Consumption (typ.) | <3.5mW @ 3.3V |
| Dimensions and Weight | 40mm x 25mm x 23mm, 8g |

Operating Conditions

| | |
|---|--|
| Operating Conditions – Temperature | 0°C to 50°C (Standard) -25°C to 55°C (Extended) |
| Operating Conditions - Humidity | 0-95% RH, non-condensing |
| Storage Conditions - Temperature | -40°C to +70°C |
| Ambient Operating Pressure | 500mbar to 2bar |
| Sensor Lifetime | >15 years |
| Environmental Compliance | RoHS and REACH |