MGC20-CO2

Vehicle CO2 Sensor

MFrontier MGC20-CO2 automotive carbon dioxide sensor adopts dual-channel NDIR (non-dispersive infrared) gas measurement principle, lightweight metal gas chamber and high-precision sampling circuit, and has built-in temperature compensation, air pressure compensation and self-calibration functions to accurately measure vehicle the gas concentration of CO2 in the internal environment. Has the advantages of long service life, fast response, high measurement accuracy, good gas selectivity, and stable performance. It can be used for interior environment detection, life survival monitoring, fresh air control and lithium battery thermal runaway gas monitoring.

High precision

Stable performance

Support multiple output modes

Built-in air pressure/
temperature compensation

Quick response

Applications

- In-vehicle environment detection
- Lithium battery thermal runaway monitoring
- In-vehicle life monitoring
- In-vehicle fresh air control

Parameters

Measuring range	0~10000ppm (0~1%) can be expanded to 0~50000ppm (0~5%)
Measurement accuracy	±50ppm±5% RD
Temperature effect	±5ppm/ or ±0.02%RD/, whichever is greater, after compensation
Air pressure effect	≤±0.02%RD/hPa, after compensation
Stability	≤1%FS/year
Warm-up time	Operation time: about 1min, reaching performance: about 5min
Response time	T90 ≤25s
Operating voltage	8~18V DC, power supply ripple: Vp-p≤60mV
Operating current	Average ≤20mA@12V, peak ≤65mA@12V
Output method	LIN bus
Waterproof and dustproof level	IP55 optional
Dimensions	52.1×26.9×26mm