



Compact, low-cost sensors for carbon dioxide designed for OEM applications. Available with or without housing. Two measuring ranges (0...2500 ppm or 0...5000 ppm) and output levels as standard. Single channel. Tailor-made solutions possible.

## Technical data

Parameter	madIR A01
Measuring method	infra-red absorption, 1 channel with light modulation
Light source	T1 lamp, 5V/40mA
Modulation frequency	10.0Hz
Detector	1 channel with filter
Wavelength / band width	CO <sub>2</sub> -4.24µm /180nm
Housing	Aluminium or ABS
Sampling	Diffusion
Operating temperature	0 ÷ +50°C
Storage temperature	-20 ÷ +70°C
Humidity	5÷90%, non-condensing
Voltage supply	Standard: 12 VDC, optional: 13...30 VDC or 9...24 VAC
Power	ca. 1 W
Analogue outputs	Begin and end can be user-configured within the range Current: 0 - 20 mA, linear, Voltage: 0 - 10 V, linear
Interface	RS 232C
Use in Network	no
Averaging time	2÷32s user-configured
T90	< 20s
Range	Range
Accuracy	+/- (3% of reading + 1.5% of range)
Calibration	10 point calibration stored in EEPROM
Recalibration	not necessary
Size	Alu:105x30x18 mm, ABS:120x80x55 mm
Weight	Alu: 80g, ABS:150g

## Measuring ranges

Range	Resolution	High resolution lower range	Resolution of lower range
0...2500 ppm	10 ppm	1500 ppm	1 ppm
0...5000 ppm	10 ppm	1500 ppm	1 ppm

Other ranges possible on request

## Standard configuration

- Mounted in an aluminium casing
- 1 channel systems
- Flow measurement
- Temperature compensated
- Using microprocessor technology
- Linear voltage output - active range (begin and end) may be user-configured within the nominal range 0...10 V.
- Linear current output - active range (begin and end) may be user-configured within the nominal range 0...20 mA
- Measuring range - active range (begin and end) may be user-configured within the nominal range (see Range)
- Voltage supply 12 VDC
- Interface RS232C
- PC programme for changing the sensor settings and for data-logging

## Optional equipment

- Display module
- Voltage supply 13...30VDC or 9...24 VAC
- IP54 ABS housing with all connections



Sensor in IP54 ABS housing

# madur

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