

INFRARED CO₂ SENSOR FOR OEM APPLICATIONS

The innovative material and construction of this double beam infrared industrial measuring system ensures Carbon Dioxide is detected quickly and precisely. A new digital algorithm evaluates and processes the measured signals, offering long-term stability in a light-weight, compact and cost-effective package. The infrared measuring system detects the absolute Carbon Dioxide content of ambient air and monitors itself constantly, signalling if there is a malfunction of its hardware or software.



C3 standard CO₂ infrared sensor.
Part no. 2112B7000 or
2112B7050

C3 STANDARD CO₂ SENSOR – SPECIFICATION –

Principle: Double beam infrared absorption

Range: **Variant 1 – ppm ranges**

Part No: 2112B7000

standard: 0 – 3,000 ppm

optional: 0 – 5,000 ppm

optional: 0 – 6,000 ppm

optional: 0 – 10,000 ppm

optional: 0 – 20,000 ppm

optional: 0 – 30,000 ppm

Variant 2 – % volume ranges

Part No: 2112B7050

standard: 0 – 5 % volume

Other ranges on request

Accuracy: +/- 2% of f.s.d.

Output signal: 4 – 20 mA or 0.1 – 10 V
(please advise output required at time of order)

Reproducibility: +/- 1% of f.s.d.

Ambient pressure: 900 – 1100 hPa

Response time t90: approximately 30 sec

Ambient humidity: 15 – 95% rel.

Gas entry: by diffusion

Operating voltage: 24 V d.c. +/- 5%

Ambient temperature: -10°C up to +50°C

Monitoring coverage: 80 – 200m²

Weight: 98g

Min-max. operating voltage: 21,6 – 26,4V

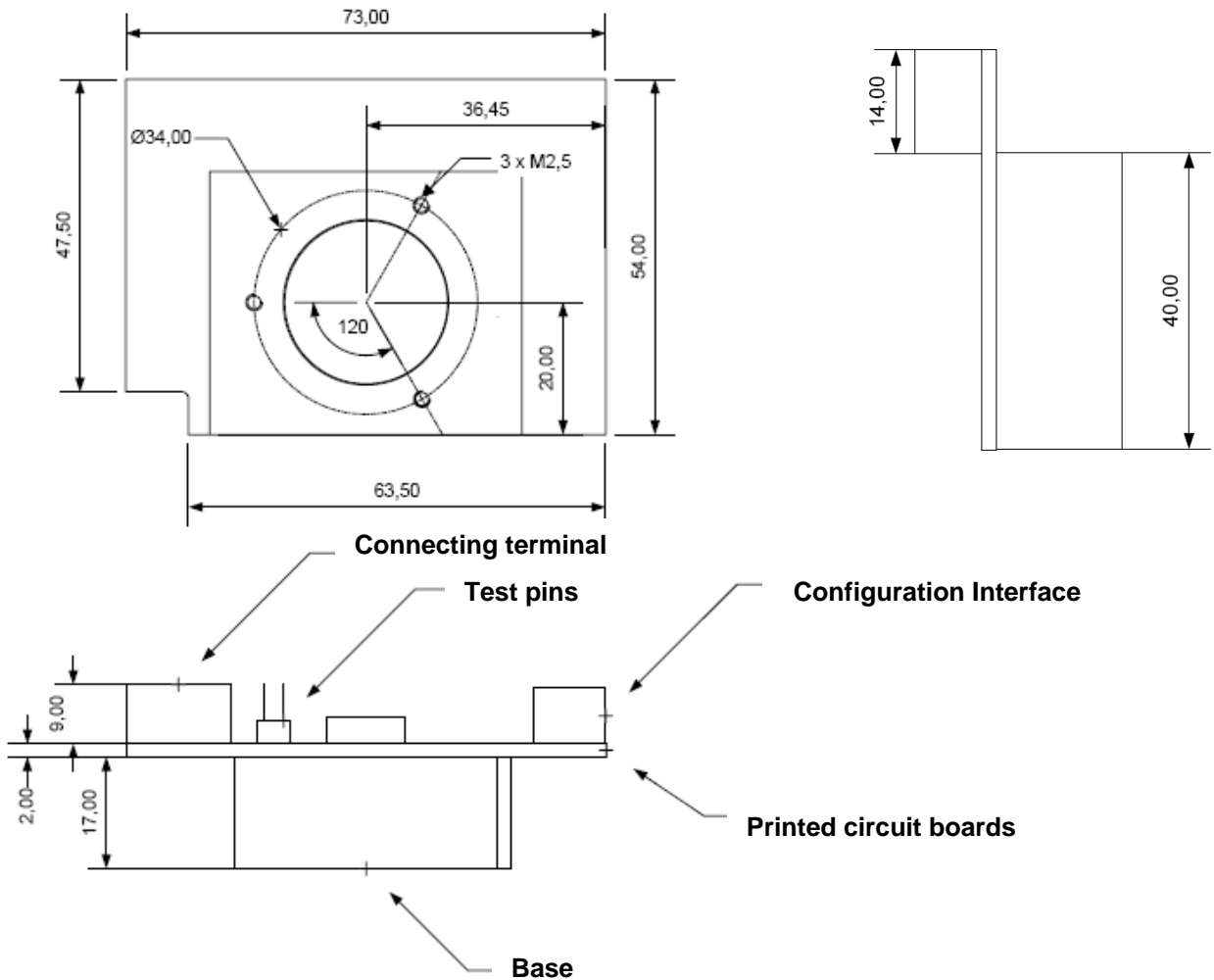
Warranty period: 6 months

Dimensions: 74 x 55 x 30 mm (L x W x H)

Resolution: dependent upon range. For example, 0-3000ppm range – 60ppm resolution

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C3 STANDARD CO₂ SENSOR – DIMENSIONS



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Please note: The components on the front and back printed circuit boards, including the configuration interface and connecting terminal, require a distance of at least 10mm from housing or other devices.

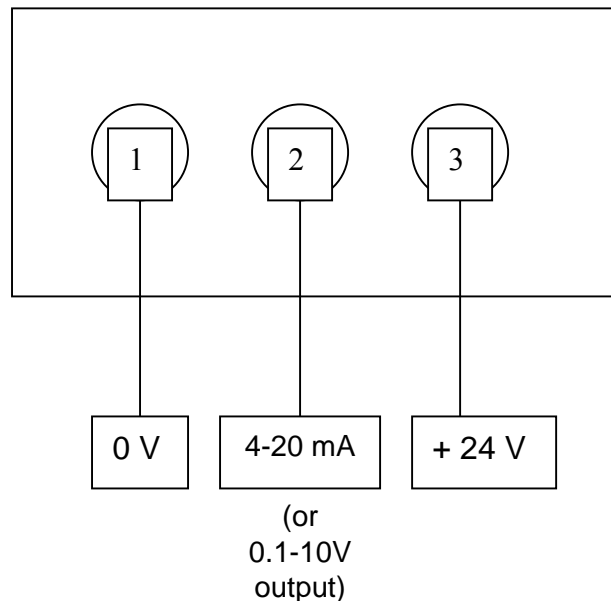


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MANAGEMENT SERVICES LTD

Terminal diagram OEM Infrared CO₂ Sensors



For the connection between the infrared sensor and Controller, a four wire screened cable with a total loop resistance of max. 100 Ω should be used. Terminal 1 and 3 is used for power supply 24 V d.c. The measuring signal 4-20 mA or 0.1-10V is available at terminal 2.

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