VCP-DXC220

Product Description

USB Water resistant CO2 sensor 20% for harsh environments – with VCP mode

The DXC220 is a USB-connected carbon dioxide (CO_2) gas measuring instrument for monitoring and data acquisition purposes. Built around a state-of-the-art non-dispersive infrared (NDIR) CO_2 sensor, it features exceptional accuracy, performance and stability. In addition, the DXC220 automatically compensates the CO_2 value against the ambient temperature, thanks to its built-in precision temperature sensor.

Optionally, some models are available with an external water resistant and precision temperature and humidity sensor probe, allowing an accurate reading of the surrounding conditions. The waterproof M8 connector makes the probe field-replaceable and is perfect for quick replacement or custom cable length.

The DXC220 is rated IP64, thanks to its water-resistant housing and hydrophobic/oleophobic air filters. It may be installed in harsh and damp environments and sustain water sprays

Specifications

Carbon dioxide (CO_2)[5]

- Detection range: 0% to 20%
- Accuracy: ±70 ppm ±5% of reading
- Non-linearity: 1% (full scale)
- Operating temperature range: 0°C to 45°C
- Operating humidity range: 0 %RH to 100%RH
- Technology: nondispersive infrared (NDIR)
- Dual-channel detection
- Operating atmospheric range: 950 mbar to 1060 mbar
- Pressure Error: 0.13% of reading per 0.133 kPa in normal atmospheric conditions

Temperature (option)

- Operating range: -40°C to 70°C[2]
- Accuracy: ±0.3°C (-20°C to 70°C), max ±0.4°C
- Resolution: 0.015°C (typical)
- Repeatability: 0.06°C (typical)
- Filter material: PTFE membrane
- Filter efficiency: >99.99% for particles ≥200 nm

Relative humidity (option)

- Operating range: 0 to 100 %RH
- Accuracy: (at 25°C)
    - Typical: ±2 %RH from 0 to 90 %RH
    - Max: ±2.5 %RH from 0 to 90 %RH
      ±4.5%RH from 90 to 100 %RH
- Resolution: ±0.01 %RH (typical)
- Repeatability: ±0.1 %RH

Miscellaneous

- Protection rating: IP64
- Powered through USB
- Communication: USB 2.0
- Average current: 30 mA
- Maximum current during measurement: 85 mA
- Enclosure: ABS Plastic, USB-key form factor
- Weight: 21 g
- Overall dimensions: H 2.9″ (74 mm) X W 1.35″ (35 mm) X D 0.72″ (17 mm)

Dracal DXC220 Datasheet