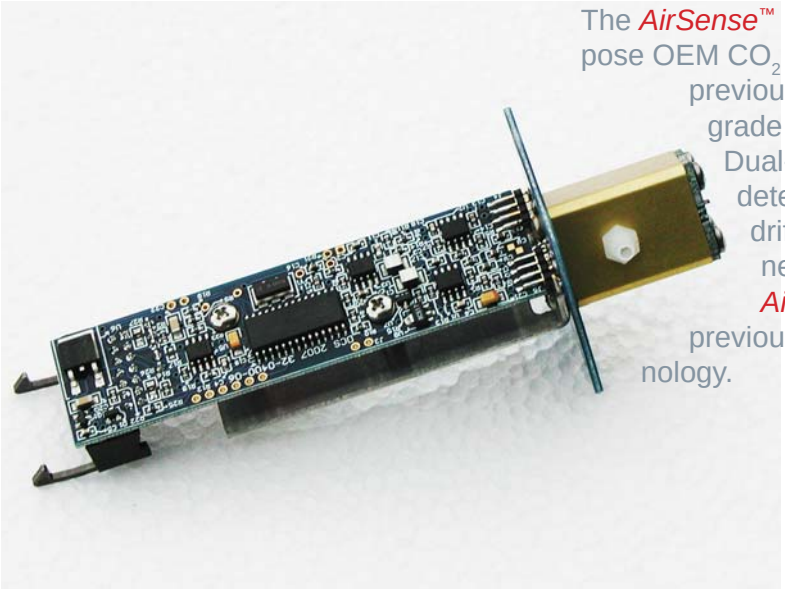
Digital Control Systems, Inc.

AirSense™ Model 400 OEM Infrared Carbon Dioxide Sensor

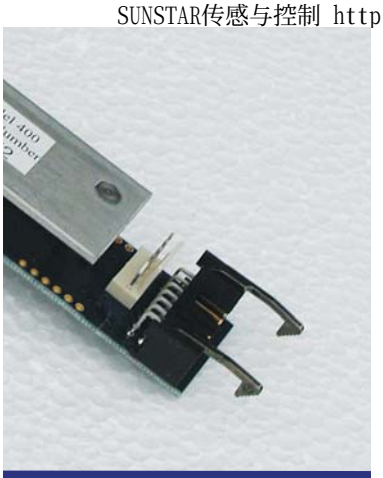
- I²C or RS-232 Capability
- Dual-beam technology
- Reduce energy cost
- Gold plated optics

Affordable and Ease of Installation



The *AirSense*™ Model 400 is the first compact, general-purpose OEM CO_2 analyzer with dual-beam infrared technology, previously available only in much larger laboratory-grade sensors.

Dual-beam technology provides a second infrared detection channel to automatically correct for any drift in the measurement system, eliminating the need for frequent calibration. This gives the *AirSense*™ Model 400 a distinct advantage over previous sensor designs utilizing single-beam technology.



Equipped with 14 pins and 5 pins analog connectors standard

Elite sensor technology

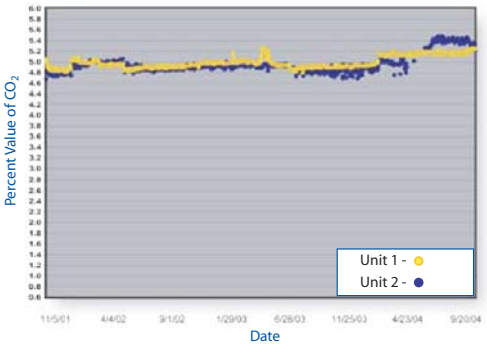
Elite sensor technology is the result of combining DCS' exclusive dual-beam IR detector with our proven gold plated reflective optics to achieve accurate long-term results. The dual-beam detector of the Model 400 responds in less than 16 seconds to changes in gas concentration. The processing unit continuously measures and corrects for short and long term changes, compensating for IR Source Aging and reflectivity changes.

Easy to install and support.

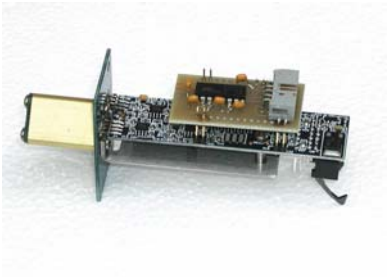
Integrating the Model 400 is simple because the module is equipped with both a digital 14 pin connection for I^2C communication, (RS-232 Board can be added as an option) and 5 pin analog connection for linear measurement. The dual-beam detector of the Model 400 responds in under 16 seconds to changes in gas concentration. The processing unit continuously measures and corrects for short and long term changes, compensating for IR Source Aging and reflectivity changes.

Parameter	Value
Operating Principle	Non-dispersive infrared (NDIR) dual wave-length detector
Gas Sampling Method	Diffusion or sample draw
Measurement Range	0-20% CO_2
Repeatability	± .1% CO_2
Measurement Accuracy	± 5% of reading or .1% CO_2 (whichever is greater)
Recommended Calibration Interval	5 years
Warm Up Time	Less than 1 minute
Power Requirements	7.5 - 15 VDC @ 170 mA max (125 average) Approx. 1.0W with 12V. input
Power Consumption	Less than 1 watt
Operating Temperature Range	0 - 50° Celsius
Operating Humidity Range	0 - 100% RH, non-condensing
Voltage Output (linear)	0 - 1 VDC or TTL level PWM
Optional interface	RS-232
Calibration	Single gas
Dimensions	2.19 x 2.21 x .572 inches
Digital interface	i^2C slave

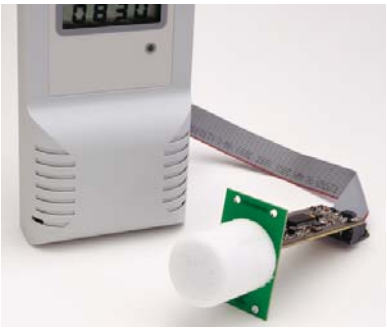
DCS CO2 Family



Long Term Accuracy	M400 over 3 year period



RS-232	Communication devise



Expansion Board	Includes display/controller

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