

CO₂ Infra-Red Gas Analyzers



CO₂ Gas Exchange in Animals, Plants, Soil and Environment

Qubit Systems produces non-dispersive infrared CO₂ analyzers that measure CO₂ in 0 to 2000 ppm range (**\$157**) or in 0 to 10% range (**\$158**). Custom made CO₂ analyzers for higher CO₂ levels can also be provided. The S157 CO₂ Analyzer is ideal for CO₂ exchange measurements with leaves, insects, small animals, soil or organisms with a low metabolic rate. For measurements with larger or more active animals, and in situations where high CO₂ fluxes may occur the S158 is preferred. The CO₂ analyzers may be used in a flow-through gas exchange configuration for instantaneous and continuous measurements of CO₂ exchange or in stop flow or closed system modes for measurements at low activity levels. When used with the S104 Differential Oxygen Analyzer, or S108 Absolute Oxygen Analyzer, Respiratory and Photosynthetic Quotient can be calculated. We recommend using these analyzers with our C950 Gas Exchange Software or other data acquisitions software plus data acquisition interface.

Key Features:

- Switchable ranges (low and high)
- digital display
- Non-dispersive infrared technology
- Modulated infrared light source = no moving parts
- 0 – 5 V analog output at both range settings
- Optional battery pack for field use
- Compact and portable
- Weatherproof case

Software:

We recommend Qubit's C950 gas exchange software (optional) for use with the S157 and S158 CO₂ analyzers. The software calculates all major respirometry and photosynthesis parameters, and corrects data for variations in environmental conditions

Sample References

- Jumbo-Lucioni P et al. (2010) BMC Genomics 11: 297- 309
- Krachler RF et al. (2009) Biogeosciences Discuss. 6: 491–514
- Scarpeci TE, Valle EM. (2008) Plant Growth Regul. 54: 133-142
- Busi MV et al. (2006) The Plant Journal 48: 873-882

