



Be Right™



Orbisphere 314xx Carbon Dioxide Sensors

The Orbisphere patented Thermal Conductivity sensor has been developed to give continuous CO2 measurements in gas phase or dissolved in a liquid. The measuring technique is a combination of a gas diffusion membrane and a solid-state gas thermal conductivity detector.

A micro volume enclosed between a semi-permeable membrane and a thermal conductivity detector is periodically flushed with a purge gas. After each purge, the gas to be measured diffuses from the sample through the membrane, changing the thermal conductivity of the gas surrounding the detector. A change in thermal conductivity modifies the detector resistivity. This is measured, together with temperature, to calculate the gas concentration.

- Continuous CO2 measurements
- Selective measurement, result unaffected by the presence of other gases
- Fast response time to improve plant productivity
- Compact design for easy insertion into a process line or a flow chamber

Part Number	Accuracy	Range	Pressure Range	Wetted Materials	USD Price
31490TC	(Sample temp. 20 - 50°C within ± 5°C of calibration temperature) The greater of ±1% of reading or ±8 mbar or ±0.012 g/kg or ±0.006 V/V				Contact Hach