

## The Probe



GasWizard Probe

The sensor is a small probe, which can be mounted in a variety of locations such as in the bell nipple. A sample is then taken before gas losses occur in the flow line. Measurements can be taken in the suction line to determine degassing efficiency by comparing the gas entering and exiting the well. The probe can be used in any type of drilling fluid; oil, water, air or foam.

The device has no moving parts in the drilling mud, which adds to the products longevity. The probe has a microprocessor that provides automatic calibration and zeroing, pneumatic control, thermostat and ranging.

Calibration is achieved by simply placing the probe in a known gas mixture (typically 2% methane in air) and starting the calibration cycle. The microprocessor takes care of the rest. Zeroing is just as easy; the user simply selects zero from his computer and the probe will introduce fresh air then automatically zero itself.

The electronics enclosure has an active temperature control mechanism to maintain a constant temperature in hot and cold environments. The output is a standard WITS format, allowing it to be connected to the Datalog WellWizard system and 3<sup>rd</sup> party drilling monitoring systems.

## Specifications

Gas Ranges	0-20% and 0-100% by volume gas in mud
Accuracy	2% of reading
Resolution	0.01% gas by volume
Power Supply	85 - 265V, 50-60 Hz 50 watts maximum
Detector	Catalytic combustion detector
Output	RS484 (4wire), WITS level 0, 4000' transmission distance or wireless
Environmental	Operating Temp -40 °C + 50 °C
Humidity	90% RH
Dimensions	16"x12"x7" enclosure, 7" probe and flexible stainless steel hose
Location	Suitable for hazardous locations; Class 1, Division 1 Groups C&D. NEMA 4
Weight	60 lbs