

Moisture Chek 2000™

Microprocessor-Based Electrolytic Natural Gas Moisture Analyzer

Features

- ▶ Accurate microprocessor-based electronics
- ▶ Reliable improved measurement sensor design with exclusive Ultra Cell Sensor
- ▶ Easy operation
- ▶ Ability to recondition sensor in the field, no spare sensors required
- ▶ Multiple power options: Battery operation 115 or 220VAC; 12-15 VDC or 24-30 VDC, 2.5 VA; 115 or 230 VAC to 12 VDC
- ▶ Multiple outputs (stationary version only): 4-20 mA analog, RS-232C serial, dual alarm solid state relays
- ▶ Selectable display options

Description

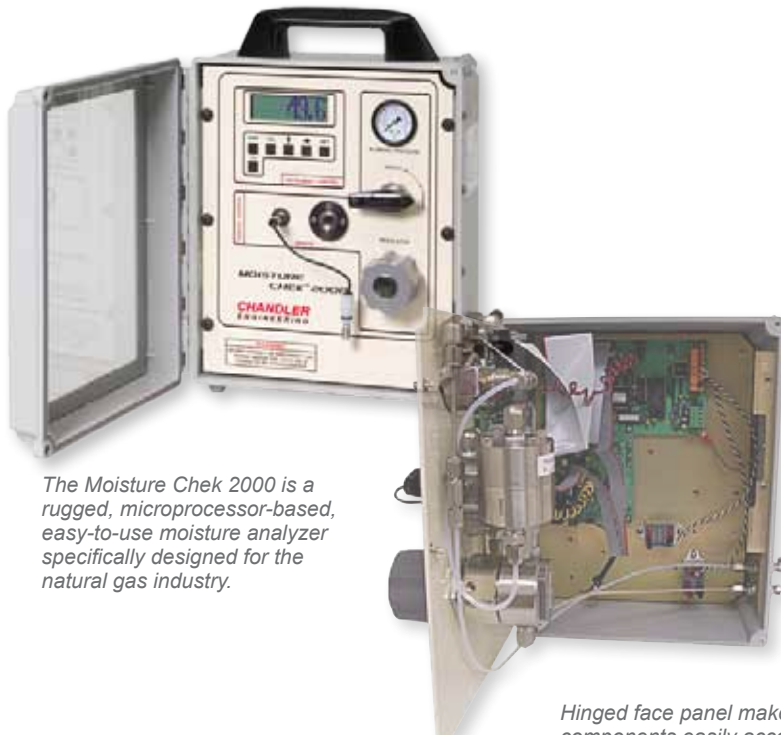
The Moisture Chek 2000 is a rugged, microprocessor-based, easy-to-use moisture analyzer specifically designed for the natural gas industry. It uses phosphorous pentoxide (P_2O_5) sensor technology (Ultra Cell™) coupled with microprocessor-based electronics to provide accurate, reliable moisture measurements. The Ultra Cell Sensor can easily be reconditioned in the field eliminating the need for spare sensors. The Moisture Chek is available in a Class I, Div 2 portable, and both Class I, Div 1 and Class I, Div 2 stationary models. Whether in the field or on-line, the Moisture Chek 2000 is easy to use and delivers accurate readings.



The Moisture Calibrator 2000C.

Moisture Calibrator

The Moisture Calibrator Model 2000C is designed to provide accurate standards of moisture vapors in an inert gas (nitrogen). It offers a simple and direct method for performance testing and for calibrating different types of moisture analyzers by offering a "calibration standard" to verify readings. The 2000C provides the ability to verify and recalibrate the Moisture Chek 2000 analyzer in the field. It saturates nitrogen to known moisture and concentrations based on temperature and pressure. When the temperature and pressure settings from the calibrator are entered into the Moisture Chek calibration menu, the analyzer automatically calculates the moisture concentration.



The Moisture Chek 2000 is a rugged, microprocessor-based, easy-to-use moisture analyzer specifically designed for the natural gas industry.

Hinged face panel makes components easily accessible for servicing stationary units.

Moisture Chek 2000

Specifications

Instrument Classification:

Model 2000P Portable:

Single housing, FM/CSA approved for use in Class I, Div 2, Group D and EEx-n-I-T6 locations.

Model 2000S Stationary:

Dual housing, FM/CSA approved for use in Class I, Div 1, Group D and EEx-n-I-T6 locations. Sensor enclosure is installed in hazardous area and electronics enclosure is installed in Div 2 or General Purpose area. Intrinsic safety barrier is included.

Measurement Range:

Standard: 0.5 to 50 lb/MMscf, 10-1050 ppmv, -80 to -8°F (-68 to -22°C), Dew Point Temperature at 14.7 psia base pressure.

Extended: 15 to 285 lb/MMscf, 300-6000 ppmv, -31 to 32°F (-35 to 0°C), Dew Point Temperature at 14.7 psia base pressure. Operating pressure is 20 psig.

Low Pressure: 0.5 to 50 lb/MMscf, 10-1050 ppmv, -80 to -8°F (-68 to -22°C), Dew Point Temperature at 14.7 psia base pressure. Operating pressure is 5 psig.

Model 2000S-Div 2 Stationary:

Single housing designed for use in Class I, Div 2, Group D and EEx-n-I-T6 locations.

Performance:

Accuracy: ±2% of reading

Repeatability: ±1% of reading

Range: 0.5 to 50 lb/MMscf, 10-1050 ppmv, -80 to -8°F (-68 to -22°C), Dew Point Temperature at 14.7 psia base pressure.

Outputs:

Stationary: 4-20 mA analog signal; serial RS-232 and high/low alarm solid-state relays.

Sample Input:

Min Pressure: 50 psig standard.

Max Pressure: 100 psig recommended. (Up to 2,500 psig allowed providing liquids are not condensed due to the Joules-Thompson cooling effect associated with pressure reduction.)

Sample Flow: Approx. 500 ml/min; 75 cc/min to sensor.

Power Requirements:

Portable: 12 VDC lead acid battery, 110-240 VAC, 50/60 Hz charger is supplied with analyzer.

Stationary: 12-15 VDC, 24-30 VDC or 115 VAC with voltage adapter. (Optional 85-230 VAC, 50/60 Hz power supply available.)

Power Consumption: 2.5VA

Environmental:

Ambient Temp: 0° - 130°F (-18 to 54°C), non-condensing.

Enclosure: Rated NEMA 4, 4X, IEC 529, IP66

Sampling Kits

All kit components are fully assembled.

Sampling Kit for Portable Moisture Chek

Part Number: 2000-0042

- ▶ Regulator: 3,500 psig/2-250 psig with gauges.
- ▶ Genie Membrane filter to eliminate any liquids.
- ▶ 10 Mega-Glysoorb filter cartridges.
- ▶ 20-ft length of 1/8" SS tubing with fittings.
- ▶ Needle valve with fittings, nipples and connectors.

Sampling Kit for Stationary Moisture Chek

Part Number: 2000-0150

- ▶ Regulator: Genie Membrane probe regulator with relief valve, pressure gauge and shutoff valve. Inlet pressure 2000 psig max. Outlet pressure 0-200 psig, 3/4" male NPT, 1/4" outlet. Insertion length is 4".
- ▶ Threadolet for probe, 3/4" NPT for 1 - 30" line size.
- ▶ Mega-Glysoorb filter to absorb vapor contaminants.
- ▶ 20-ft length of 1/8" SS tubing with fittings.
- ▶ All necessary fittings, nipples and connectors.



150 Freeport Road, Pittsburgh, PA 15238
Ph. +1-412-828-9040, Fax +1-412-826-0399
www.chandlerengineering.com



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Specifications subject to change without notice.

SALES AND MANUFACTURING:

USA - Delaware
455 Corporate Blvd., Newark DE 19702 • Tel: +1-302-456-4400, Fax: +1-302-456-4444

USA - Oklahoma
2001 N. Indianwood Ave., Broken Arrow OK 74012 • Tel: +1-918-250-7200, Fax: +1-918-459-0165

CANADA - Alberta
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WORLDWIDE SALES AND SERVICE LOCATIONS:

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