

ANALYZER SOLUTIONS FOR YOUR PROCESS!

Moisture Monitor Application Data Sheet

A. General

1. Company: _____
 Location: _____
2. Stream to be monitored: _____
2. Contact: _____ Ph: (____) _____
 Position: _____ Fax: (____) _____

B. Gas Sample Data

1. Normal Composition (mole %)

N ₂	_____	H ₂ O	_____
CO ₂	_____	CO	_____
C ₁	_____	O ₂	_____
C ₂	_____	Ethylene	_____
C ₃	_____	Propylene	_____
iC ₄	_____	H ₂ S	_____
nC ₄	_____	Methanol	_____
iC ₅	_____	Acetylene	_____
nC ₅	_____	I-Butene	_____
neo-C ₅	_____		
C ₆	_____	Others	
C ₆₊	_____	_____	_____
C ₁₂₊	_____	_____	_____
C ₂₀₊	_____	_____	_____

2. Unusual Components or Contaminants _____

Note: mg/m³ @ 15 °C, 101.325 kPa and lb/MMcf @ 60 °F, 14.7 psia.

3. Operating Data:

	Normal	Maximum	Minimum	
Stream Pressure	_____	_____	_____	<input type="checkbox"/> kPa (gauge) <input type="checkbox"/> psig <input type="checkbox"/> bar
Stream Temperature	_____	_____	_____	<input type="checkbox"/> °C <input type="checkbox"/> °F
Hydrocarbon Dewpoint	_____	_____	_____	<input type="checkbox"/> °C <input type="checkbox"/> °F
Water Dewpoint	_____	_____	_____	<input type="checkbox"/> °C <input type="checkbox"/> °F
Water Content	_____	_____	_____	<input type="checkbox"/> mg/m ³ <input type="checkbox"/> lb/MMcf

(Note: 1 lb/MMcf = 16.0185 mg/m³)

Alarm Setpoints:

Hydrocarbon Dewpoint _____ °C °F Water Dewpoint _____ °C °F
 Water Content _____ mg/m³ lb/MMcf

Note: mg/m³ @ 15 °C, 101.325 kPa and lb/MMcf @ 60 °F, 14.7 psia.

C. Analyzer Location

1. Monitor installed: indoors outdoors (in weather-proof cabinet)
2. Ambient Conditions:
 - i) Temperature, min: _____ °C °F max: _____ °C °F
 - ii) Average Barometric Pressure _____ mm Hg kPa in Hg
OR
 Plant Elevation above Sea Level _____ m ft
 - iii) Relative Humidity of Air, min: _____ % max: _____ %
 - iv) Special Conditions (e.g. Sandstorms, Hurricanes, etc.) _____
3. Area Classification:
 - General Purpose
 - Hazardous: Class _____, Division/Zone _____, Group _____
4. Distance from Monitor to Sample Point: _____ m ft

D. Utilities

1. Power to the Monitor: 120V,60Hz 240V,60Hz Other (specify) _____
 Is UPS Required (350 W)? Yes No
 If Yes, UPS supplied by: AMETEK Customer
2. Is Instrument Air Available? Yes No
 If Yes, Pressure: _____ kPa (gauge) psig Water Dewpoint _____ °C °F
3. Is Steam Available? Yes No
 If Yes, Pressure: _____ kPa (gauge) psig

In locations where relative humidity is high, it may be necessary to purge the thermoelectric cooler compartment may to prevent damage to cooler from ice build up on the outside of the cooler. Instrument air would be a convenient purge gas. Alternatively, a separate pressurized tank of dry gas or ambient air with a desiccant is acceptable. The necessary dry gas flow rate required is less than 10 L/d (0.35 cfd).

The temperature of all components comprising the sampling system must be kept at least 5 Celsius (10 Fahrenheit) degrees above the highest expected dewpoint temperature. For outdoor installations in cooler climates, the necessary heating may be accomplished using electric heaters or steam.

E. System Configuration

1. Water content option: Yes No
 If Yes, Monitor supplies loop power and conditioning (AMETEK supplies pressure transmitter).
 Monitor provides isolation for customer supplied current loop pressure signal.

Graphs showing equilibrium water vapour content of natural gas as a function of temperature and pressure are on the attached pages.

F. Tag Numbers

Are tag numbers required? Yes No

If Yes, Analyzer Tag: _____

NOTE: The accuracy of the hydrocarbon dewpoint is based upon pure component specifications of propane.

Completed by: _____ Date: _____

Phone: (_____) _____