

Continuous Dew Measurement in Explosive Area for flammable and Non-Flammable Gases





Vasthi Engineers Moisture Analyzer Model VMA - 888 is heavy duty, industrial hygrometer systems for measurement of high pressure, process gases and vaporized liquids on natural gas platforms and terminals, petrochemical plants and industrial gas manufacturing facilities. Vasthi moisture sensing technologies with sample conditioning system design engineering capabilities to provide a reliable and easy to operate, multi-channel on-line instrument for both flammable and non-flammable gases

Highlights

- Simple, cost efficient operation and low-maintenance
- · Protected against glycol or other liquid contaminants
- Accurate direct dew-point measurement at process pressure up to 12 kg
- Moisture range from ambient to ppb level with exhaustive list of hygrometric units, including key parameters of natural gas
- Two 4-20 mA configurable outputs and digital Modbus RTU based communication.
- Assured calibration integrity traceable.
- User programmable or real-time active pressure compensation for moisture content calculation
- Multichannel with up to 8 independent measurement channels

Applications

- Natural gas production and processing
- Pipeline drying
- Offshore export pipeline natural gas
- Transmission pipeline monitoring
- · Fiscal metering of gas
- Gas storage facilities
- Refinery recycle gas reformer and plat former
- · LNG production processing and receiving terminals



Vasthi Moisture Analyzer

This Model VMA-888 is a rugged on-line instrument tailored to customers' specific application and technical requirements. Measurements can be made across a wide range from -80 to +20 $^{\circ}$ C dew point with an accuracy of $\pm 1\,^{\circ}$ C dew point and at process or pipeline pressures up to a maximum of 12kg.

The rack-mounted VMA-888 Control Unit provides real-time two-line display of moisture content/dew point and pressure, user settable alarms together with analog output and digital communications, conveniently located in a safe area. Intrinsically safe sensors, with a sampling system, are installed in the hazardous zone to minimize sample transportation time and ensure fast response to process moisture changes.

The Control Unit in the multi-channel MCU format can also include moisture in liquid analysis function by combining with Moisture in Liquid Analyzer.

Easy to use with complete functionality

The 19" sub-rack mounting Model 888. Control Unit is simple to operate. The bright alphanumeric LED display with optional live pressure compensation provides unit conversions from dew point to an exhaustive list of moisture content units, so the user has flexibility to select the preferred hygrometric unit. The conversion method is for ideal gases and also specific to natural gas.



The front panel interface, enables the user to scroll through the setup menus to easily configure the analyzer to their own requirements. Four user-adjustable alarm points and two analog 4-20 mA outputs are provided as well as a digital RS485 RTU for connection to external devices.

Applications

- Petrochemicals
- Natural Gas
- Utilities SF6 etc.
- Industrial Driers
- Compressed Air
- > Pharmaceuticals
- Medical
- Nitrogen gas at the time of filling in the Transformers
- Alternative fuels
- > Transportation
- Military
- Aerospace
- Environmental
- Semiconductor
- Ozone Generation
- Heat Treating
- > Freeze Drying

Services by Vasthi: -

- Evaluation
- Custom Designs
- Calibration & Certification
- Repair
- Plant visiting
- Sampling Systems



Special Futures of Vasthi Dew Point meters: -

- Microprocessor based field mounted operated instrument.
- ➤ Digital Graphical Display Measuring range -80° to +30° C dew point & other ranges also available on client requirement.
- Samples compressed air up to 12 Kg/cm.
- > Pressure and up to 95°C temperature can measure directly.
- Quick disconnect fitting, desiccant test.
- Inbuilt thin film water vapor sensor.
- > Optional RS 232 computer interface & data logger





Specifications

Detection Principle

Response Time

Zero drift Accuracy

Operating Voltage

Operating Temperature

Terminations

Display

Analog Output

Digital Output

Contact rating

Communication

Power Consumption

Max. Load impedance

Degree of Protection

Thin film Capacitance

10 seconds

0.2% Full Scale

1% Full Scale

7-30 Volt DC

0-120 C

PCB mounted terminal blocks

Warn & Alarm Status LED Indicator

Inbuilt 0.5" LCD

4 - 20 mA Linear/ 0-1 V DC

Two auxiliary contact for warn & alarm

30 VDC/2A

RS232/RS485 (Optional)

3.6 W max.

350 - 650 Ohms (7V - 30V)

IP -65 explosion Proof

ADDITIONAL FEATURES (OPTIONAL)

Computer Interface: RS-232

Data Logger: 1 Megabyte, Non-Volatile Memory



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