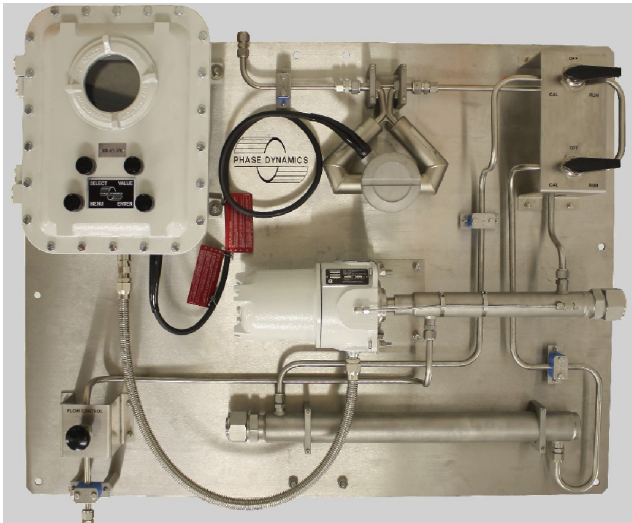


Technology for Precision Measurements



PPM ANALYZERS



REAL-TIME MEASUREMENT

Provides real-time measurement to the parts per million level of the amount of water in condensate flowing through the volume of the measurement section.

HIGH RESOLUTION

The measurement technology provides a very responsive sensor with the high resolution of 1ppm water in hydrocarbons.

TOUCHSCREEN DISPLAY

Intuitive and easily navigable touchscreen display to observe measurement data and trends.

DATA LOGGING

Convenient data logging functionality for post processing of data time series. Configuration setting changes are logged providing an audit trail.

APPLICATIONS

- Water in Condensate Measurement
- Detects Off-Spec Product Delivery
- Process Monitoring to Protect Catalyst Beds
- Enables Interdiction to Prevent Hydrates
- Alarm Triggering at Configurable Levels

FAST CONFIGURATION

PPM Analyzers are factory calibrated. Field calibration is easily accomplished while the Analyzer is installed and process fluids flowing enabling fast configuration and validation in the field.

PRECISE & REPEATABLE

The metering element is based on the highly responsive oscillator load-pull technology. This offers precise and repeatable measurements that are field proven both onshore and offshore.

QUALITY & DURABILITY

These Analyzers are manufactured to the highest standard to provide quality & durability over the long-term. Electronic assemblies are subjected to burn-in cycles. Measurement Sections are inspected and hydrostatically tested. Factory calibration is the final and distinguishing step in the manufacturing process. Phase Dynamics is an ISO 9001 certified company.

CERTIFICATIONS

- CSA Class 1, Div 1, Grp C&D, Zone 1, Grp IIB
- FM Approvals Class 1, Div 1, Grp C&D
- ATEX EEx d IIB T5, PED A1
- CE Mark, Ex II 2 GD

SPECIFICATIONS

Parameter	Range
Range	10 ppm to 1,000 ppm
Uncertainty (2 σ)	± 20 ppm
Repeatability	± 10 ppm
Resolution	1 ppm

Features

- Factory calibrated Analyzer system
- Built-in temperature compensation
- Micromotion Coriolis flow meter
- Molecular Sieve enabling in-field zero validation
- Measures across the entire volume of fluids
- Tolerant to 100% water without damage

Electronics Enclosure

Explosion proof enclosure in either aluminum or stainless steel, IP66 rated.

Display

6-inch color touchscreen for text and graphics.

Power

Supply: 100—240Vac or 24Vdc

Consumption: 18 Watts typical, 33 Watts maximum

Input / Output Interface

Analog I/O 4-20mA, 1x or 5x

Pulse Input, 1x or 3x

MODBUS RTU RS-485, 4x

HART v5/6, 1x

Alarm Relay, 2x

Temperature

Ambient: -40°C to $+60^{\circ}\text{C}$

Process: 0°C to $+104^{\circ}\text{C}$

Process Connections

1/2 inch Swagelok tubing fittings.

Operating Pressure

3,000 PSI typical.

Measurement Section

Flow-through type

Suggested flow-rates: 3 to 7 liters / minute

Materials: 316/316L SS, Duplex, Hastelloy

Temperature compensation: built-in RTD sensor

Workmanship Standards

- ASME Section IX
- ASME B 31.3
- EN 10204
- NACE MR0175-99

Reports

- PMI—Positive Material Identification
- NDE/NDT—Non-Destructive Examination