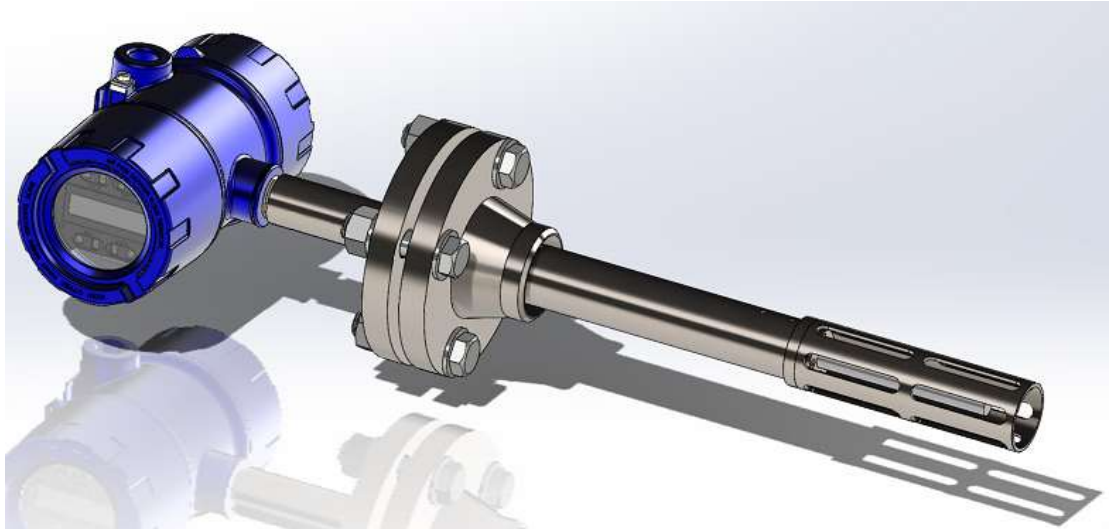




Mid-Range “Razor” Water Cut Analyzer “A CUT ABOVE”



- Temperature Measurement & Water Averaging Built-In
- Optical Interface Data Entry
- Optional Remote Display
- 2 Line LCD Display With Menus
- USB for Data Logging & Update
- Density Correction Included
- Modbus RTU and 4-20mA

Phase Dynamics is pleased to offer a new class of water in oil analyzers which continues the tradition of repeatable and precise measurements. This analyzer is named “Razor” because it is a “Cut Above” the competition at an affordable price. It is designed to replace other competitive technologies that only gave indications of the water content.

The unique design allows the use of high frequencies to obtain the reproducibility and extended water range up to the onset of the water phase. The system is fluid temperature compensated.

This is a fully factory calibrated analyzer with true data curves representative of the actual water percentage. Density correction is built in with inputs via 4-20mA or MODBUS 485. Phase Dynamics Patented Density Hold at 5% water is an industry changing invention.

The Phase Dynamics technology will view the viscous high-water content emulsion layer as a true water percentage. This allows precise control of the water draw and heavy oil measurement as compared to the typical low frequency systems showing this layer as 100% water.

Mid-Range “Razor” Water Cut Analyzer

Power Requirements: 18-28 VDC

5 Watts Typical, 10 Watts Maximum

Human Machine Interface (HMI):

Display: 2 line LCD 16 character display
Entry: Step, Enter, Value and Back Optical Keys

Measurement Section:

Pressure Ratings: Set by Flange Rating
Construction: 316/316L Standard
Built per ASME B31.3 & ASME IX
Full Material Certifications Optional
Area of Measurement Approx. 8 square inches

Electronics Enclosure:

2 Entry Explosion Proof Enclosure:
8.13” H x 4.98” W x 4.58”D inches; 5 lbs., NEMA 7

Certifications:

CSA USA & Canada
Equivalency Class 1, Zone 1, Group IIC T6 Gb Class 1,
Division 1, Groups A, B, C, D: T6

Input & Outputs:

Relay: One Normally open dry contact, 24VDC 0.5A
Digital: Two (2) RS-485 Modbus RTU
USB: Data Logging & software updates
Analog Input: One 4-20mA for Density
Analog Output: One 4-20mA

Process Connections:

Analyzer: 2”, 3”, 4” and 6” Flange
Flange Sizes up to ANSI 900
Raised Face Flanges Standard
RTJ and Flat Face Flanges Optional

Process/Ambient Temperatures:

Fluid Temperature Compensation Automatic with Built-in Temperature Probe
Ambient Temperature Ranges:
Process: 32° to +220° F
Electronics: -40° to +140° F

Analyzer Size and Operational Specifications

RANGED TO:	0-20%	20% to Inversion
UNCERTAINTY*	0.05% (0-5%) 0.1% (5-10%) 0.2% (10-20%)	0.5% Oil Phase Only
REPEATABILITY	+/- 0.05%	+/- 0.5%
RESOLUTION	0.01%	0.01%
FLUID TEMPERATURE	32 - 220° F	32 - 220° F
TEMPERATURE CORRECTION	Yes	Yes
DENSITY CORRECTION	Yes (MODBUS or 4-20mA Density Input) Exclusive hold density over 5% Water	Yes (MODBUS or 4-20mA Density Input) Exclusive hold density over 5% Water
SALINITY	Not Required 0-Inversion	Not Required 0-Inversion

Visit Our Web Site at: WWW.PHASEDYNAMICS.COM

Technology for Precision Measurements

