



## SPECIFICATIONS

Test Methods	Pour Point: ASTM D5949, ASTM D97 (IP 15 / ISO 3016) equivalent or better Cloud Point: ASTM D5773 (IP 446), ASTM D2500 (IP 219 / ISO 3015) equivalent Freeze Point: ASTM D5972 (IP 435), ASTM D2386 (IP 16 / ISO 3013) equivalent
Performance	Bias: 0 (relative to ASTM manual method)
Repeatability	Pour Point: 1.6 °C Cloud Point: 1.3 °C Freeze Point: 0.5 °C
Sample temperature	Maximum: +70 °C (+158 °F). Minimum: - 88 °C (-190 °F).
Test duration	Pour/Freeze: 8-12 minutes. Cloud: 5-10 minutes (sample-dependent)
Cycle time	User programmable
Hazard rating	Class 1, Division 1 and 2, Groups C & D. Other ratings and models are available. Contact factory.
Electrical	90 - 264 VAC, 47 - 63 Hz, 430 Watts
Purge Gas	<ul style="list-style-type: none"> <li>Nitrogen (N2) is required to purge the analyzer enclosure continuously.</li> <li>INLET Press. N2 80psig (550kPa) to 120psig (800kPa) max.</li> <li>Flow (N2 Purge) Up to 21scfm (600NL/min)</li> <li>INLET Tubing ¼" Swagelok, (ATEX: ¼" BSPP)</li> </ul>
Communication Outputs	<ul style="list-style-type: none"> <li>4-20 mA current loops for test results</li> <li>Contact switches for alarms</li> <li>MODBUS option</li> <li>Ethernet option</li> </ul>
<b>Fuels inlet stream requirements</b>	
Flow	Min. 15 gallons/hour (57 liters/hour)
Pressure	20 - 150 psig (1.4 - 10.3 Bar)
Temperature	Minimum: 3°C (5°F) above cloud point. Maximum: 50°C (120°F).
Volume/analysis	0.5 gallon (2 liters)
Dimensions & Weight	W x D x H: 24 x 6 x 12 inches (61 x 15 x 31 cm) 31 pounds (15 Kg)

Continuing research and development may result in specifications or appearance changes at any time

### ABOUT PAC

PAC develops advanced instrumentation for lab and process applications based on strong **Analytical Expertise** that ensures **Optimal Performance** for our clients. Our analyzers help our clients meet complex industry challenges by providing a low cost of ownership, safe operation, high performance with fast, accurate, and actionable results, high uptime through reliable instrumentation, and compliance with standard methods.

### PAC HEADQUARTERS

8824 Fallbrook Drive | Houston, Texas 77064 | USA  
T: +1 800.444.8378 | www.paclp.com

Our solutions are from industry-leading brands: AC Analytical Controls, Advanced Sensors, Alcor, Antek, Herzog, ISL, Cambridge Viscosity, PSPI, and PetroSpec. We are committed to delivering superior and local customer service worldwide with 16 office locations and a network of over 50 distributors. PAC operates as a unit of Roper Technologies, Inc., a diversified technology company and a constituent of S&P 500, Fortune 1000, and Russell 1000 indices.

### PHASE ANALYZER CO.

11168 Hammersmith Gate | Richmond, BC, V7A 5H8 | Canada  
T: +1 604.241.9568 | www.phase-technology.com



solid partners  
proven solutions



# 70Xi Process Analyzers

## Freeze, Cloud and Pour Point Process Analyzers

- 🌐 Optimize your refining process with fast, reliable, real-time testing of product streams
- 🌐 Maximize the yield of high-value products and reduce giveaway
- 🌐 Tighten quality control with correlation to primary test methods
- 🌐 Profit from robust design for continuous, uninterrupted measurement

# 70Xi Process Analyzers

## SMART INVESTMENT TO ENSURE AN ACCURATE MEASUREMENT OF FREEZE, CLOUD AND POUR POINT

The Phase Technology 70Xi online analyzers optimize your refining process with fast, reliable, real-time testing of product streams. With the benefit of process control, you can be closer to specifications to maximize the yield of high-value products and reduce giveaway.

Including a dedicated process analyzer in your refinery's flow from distillation lets you get quicker test results with better ASTM reproducibility.

Phase Technology online analyzer systems are ruggedly built for continuous, uninterrupted measurement. Their robust, explosion proof construction means you can rely on them to operate in even the most extreme and hazardous conditions.

### IMMEDIATE ACCESS TO DATA

15" full color touchscreen and remote access offers multitasking capability, displays several views at the same time, overlay and compare multiple phase plots in different colors.

### COMPLETE SYSTEM

Incorporates multiprocessor system, microdetectors, miniature cooler and touchscreen.



### MODULAR DESIGN

Test chamber, electronics and solenoid modules have built-in barriers to maintain separation of liquid from electronics and are field replaceable to ensure continuous operation. Easily upgrade, add or expand functions.



### INTEGRATED SAMPLE CONDITIONING

Self cleaning system effectively removes particulates and moisture

## LEADING TECHNOLOGY

Phase Technology analyzers detect phase changes with extreme sensitivity and accuracy. The Diffusive Light Scattering (DLS) technology has been standardized by many industries for the rheology and crystallization characterization of petroleum products. The technology's patented gas pulsing approach stimulates movement and allows for ultra-fine temperature resolution in pour point testing. Equipped with such

advanced technique, and driven by a philosophy that accentuates Quality and Total Customer Satisfaction, each analyzer is stress-tested for reliability assurance and custom-configured to allow for a wide selection of external interfaces and test functions of various combinations. You are guaranteed an instrument that satisfies your exact analytical specifications and a quality of service that surpasses all others.

## KEY ADVANTAGES

### MEET REGULATORY STANDARDS FOR FREEZE, CLOUD AND/OR POUR

- Precise measurement of jet fuel, diesel and other hydrocarbon products
- Measure any or all of the three cold properties in a single analyzer

### LOW COST OF OWNERSHIP

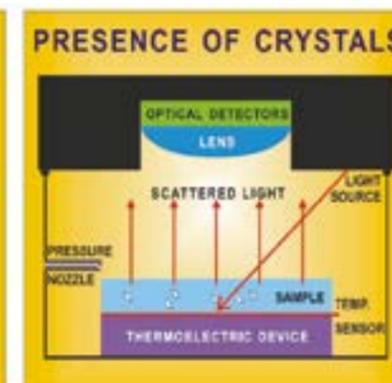
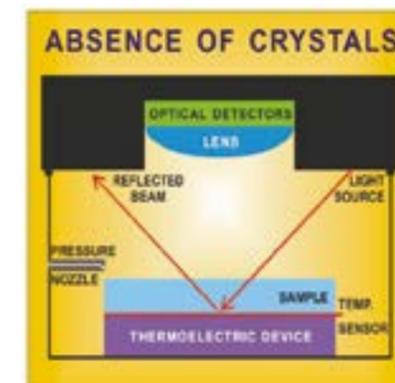
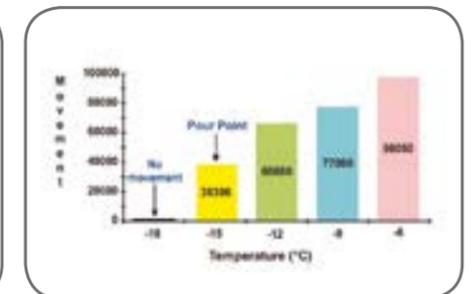
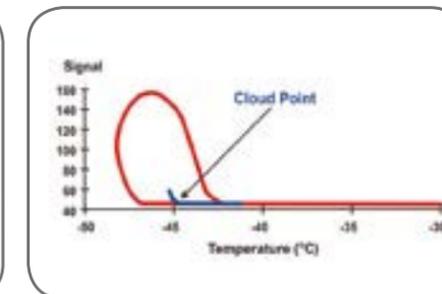
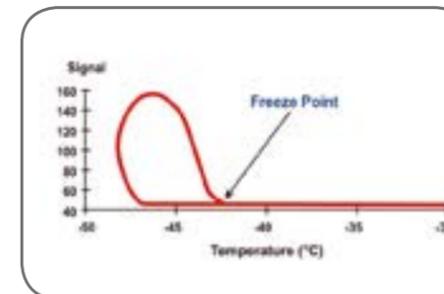
- No external chiller or water supply required
- Electricity and air are only utilities needed to operate

### PRODUCE LAB ACCURACY WITH PROCESS ROBUSTNESS

- Utilizing proven Differential Light Scattering (DLS) technology
- Complies with ASTM D5949, D5773 and D5972
- Turnkey system consists of analyzer and virtually maintenance-free sample conditioning system

### OPTIMIZE PROCESS BY KEEPING CLOSE TO THE SPECIFICATIONS

- Quick analysis in 3-12 minutes per stream
- Fast response time to process changes
- Actual measurement displayed on screen for quick verification
- Enables process control by integration with plant DCS



Diffusive Light Scattering (DLS) technology has over 25 patents