





# OptiFZP

### Next Generation Automatic Freezing Point Analyzer

- Improved Productivity and Ease of Use
- Mew Touch-Screen and Advanced Electronics
- Accurate and Precise Freezing Point Determination in less than 15 Minutes
- Compact Design with Built-in Cooling System and self-contained cleaning
- Compliant with ASTM D7153 and IP 529
- Perfect correlation to ASTM D2386 and IP 16

WWW.PACLP.COM

## OptiFZP

## ACCURATE FREEZING POINT ANALYSIS HELPS INCREASE LAB PRODUCTIVITY

The next generation ISL|PAC Freezing Point Analyzer offers proven technology used by labs worldwide. The powerful internal cooling system can measure up to  $-100^{\circ}$ C ( $-148^{\circ}$ F) without the need of an external cooling bath. The unique patented detection cell provides ultra-high accuracy with unmatched precision, while maintaining its compact footprint.

The newly designed OptiFZP includes a color touchscreen and advanced electronics that allows network printing and electronic data transfer from the analyzer to a PC.





Easy to access historical test results include detection curve

## **KEY ADVANTAGES**

#### **ACCURATE AND PRECISE**

- Patented detection cell
- Accurate detection up to -100°C temperature
- Superior correlation with manual method on contaminated samples



#### FAST AND COMPACT

- Self-contained design using powerful internal cooling
- Entire analysis in less than 15 min
- Minimal downtime between
  measurements
- No need for external cooling bath
- Automatic cleaning using next sample



#### TRACEABILITY AND DATA MANAGEMENT

- Electronic data transfer capability
- LIMS connectivity using improved IRIS platform
- Network printing capability
- User traceability



#### **USER-FRIENDLY OPERATION**

- Color touchscreen with friendly interface
- 1-button push operation
- Common electronic platform with other PAC analyzers
- Real time graphical display
- Customizable to meet specific needs

## EASY AND FULLY-AUTOMATED PROCESS

Performing freezing point analysis has never been so simple:

- Simply inject 10ml of sample
- Press the "test" button
- Get results in less than 15 minutes

Thanks to a fully automated process, no pre-test programming is necessary - the system controls the test progress and immediately reports the results data in real-time.

Self cleaning procedure simplifies the operation and reduces system downtime between two consecutive runs, while intelligent software ensures accurate analysis of neat and/or contaminated samples.



## **POWERFUL PRECISION WITH ULTRA-LOW TEMPERATURE TESTING CAPABILITIES**

Our unique, detection system utilizes powerful optics and precise temperature control, providing highly reliable freezing point measurements with excellent sensitivity to contamination levels. The sample is exposed to carefully monitored



temperature changes, causing crystal to form (during cooling) and dissolve (during reheating). The system's polarization filter and optic sensors precisely track the refraction of light as it passes through the sample.

This method, which is based on fundamental optical laws, detects all types of crystallization for any type of jet fuel. Smart detection software precisely determines freezing point according to its definition for aviation fuels, reporting results in perfect correlation to the IP 16 manual method -whether the sample being tested is neat or contaminated.

DETECTION SIGNAL

- A Laser Light Source
- **B** Polarization Filter
- C Specimen Test Cell
- **D** Polarization Filter
- E Optical Sensor





#### **SPECIFICATIONS**

General Info		
Ordering Information	OptiFZP Freezing Point Analyzer with built-in cooling system	
Standard Test Method	Compliant with ASTM D7153, IP529, DEF STAN 91-91 Correlation to ASTM D2386, IP 16, ISO 3013, JIS K2276	
Performance/System		
Temperature Range	Down to -100°C (-148°F)	
Cooling System	Internal	
Internal Memory	200 test runs	
HMI/MMI	7.4" color touch-screen	
Detection	Optical, patented	
Output	2x USB, 1x Serial, 1x Ethernet	
Operator Time	0.5 minute per test	
Test Duration	15 minutes	
Sample Volume	10 ml, including volume for cleaning	
Sample Injection	Disposable 10 or 20 ml syringe	
Cleaning	Self-cleaning operation, no cleaning required	
Calibration	Automatic calibration routine for temperature measurement. 10°C interval probe correction capabilities. Programmable calibration frequency. Calibration ticket printing.	
PC Networking	IRIS software	
Data Management	Test progress & graphic, self diagnosis tools, quality features	
Printing	Network printer (one printer for multiple analyzers)	
Data Storage	50 complete test reports stored locally, unlimited with PC	
PAC IRIS Software features for OptiFZP		
<ul><li> Run Control</li><li> Results</li></ul>	Calibration  Reports	Quality Control  Instrument Parameters
Utility Requirements		
Electrical	100-240 VAC, 200W, 50/60 Hz	
Dimensions	25 cm (10") wide, 60 cm (24") deep, 27 cm (11") tall	
Weight	25 kg (55 lbs)	

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.

#### **HEADQUARTERS**

PAC LP | 8824 Fallbrook Drive | Houston, Texas 77064 | USA T: +1 800.444.8378 | F: +1 281.580.0719 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.



Contact us for more details.

Visit our website to find the PAC representative closest to you.