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# Online Flash Point Analyzer

Measure Flash Point of Hydrocarbon Products Quickly,  
Accurately, and Completely Online

- ⊗ Designed to measure flash point from 10°C to 121°C (50° to 250° F)
- ⊗ No catalyst used, performance is not impacted by sulfur in the measured stream
- ⊗ Microprocessor-controlled instrument with self-test and diagnostic capabilities
- ⊗ Changes to configuration are possible without opening explosion proof enclosure

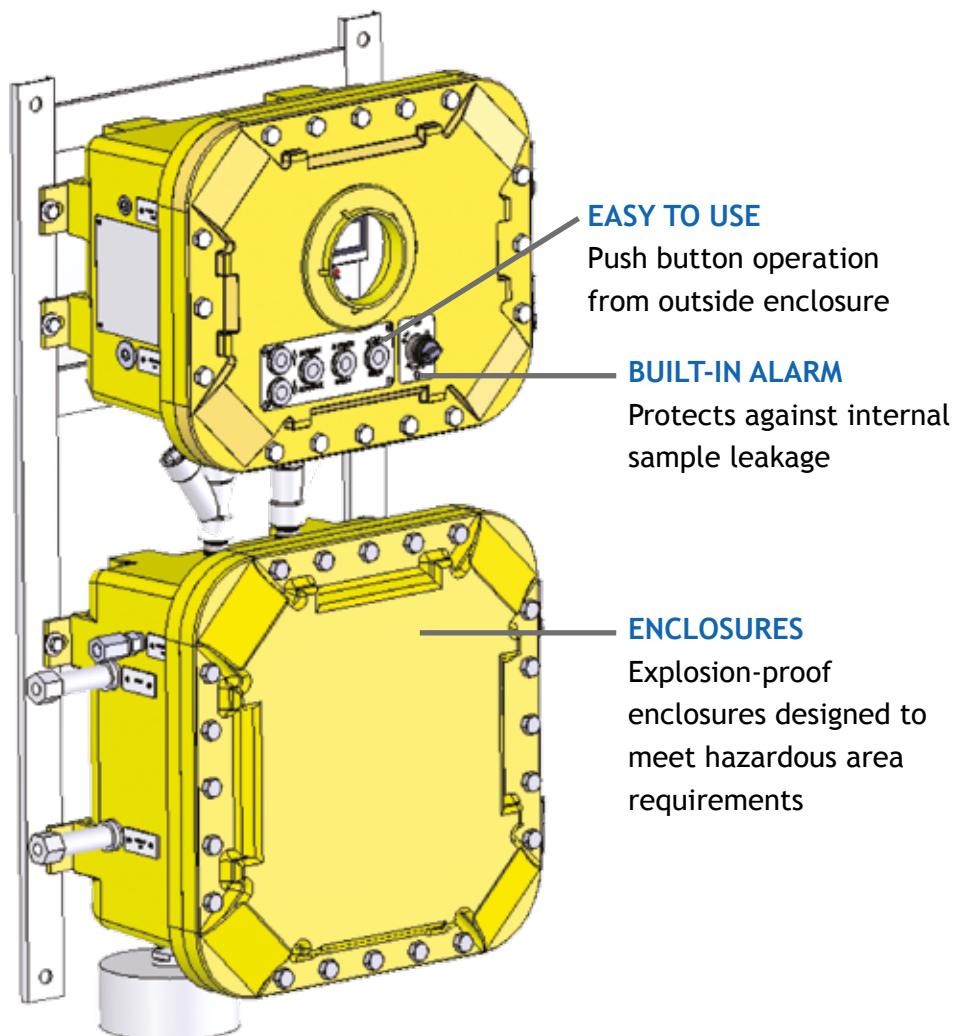
# Online Flash Point Analyzer

## ENSURE THE SAFE USE & TRANSPORTATION OF YOUR PRODUCT

Knowing the flash point is critical to the safe use and transportation of petroleum products. PAC's PSPI 45607 Flash Point Monitor is an on-stream process monitor for measuring flash points of liquid fuels, such as gasoline and diesel.

Its robust design and measurement principle delivers reliable measurements over time independently of the fuel's sulfur content.

The Flash Point analyzer is completely micro-processor controlled with self-diagnostic capabilities, making it economical and simple to operate and maintain.



## KEY ADVANTAGES

### PROVEN PERFORMANCE

- Measure flash point from 10° to 121°C (50° to 250°F)
- No catalyst used, performance is not impacted by sulfur content in the measured stream
- Microprocessor-controlled instrument with self-test and diagnostic capabilities
- Analyzer's configuration can be changed without opening the explosion-proof enclosure

### STANDARD METHODS

Correlates to:

Tag Closed Cup

- ASTM D56

Abel

- DIN EN ISO 13736
- IP 170

Pensky-Martens

- ASTM D93
- DIN EN ISO 2719
- IP 34
- DIN 51755

### PROCESS OPTIMIZATION

Flash Point is one of the key final product specifications in the refinery. By having an online monitoring solution, refineries can optimize the plant's profitability while meeting quality requirements.

## ROI

Real-time monitoring of blending process saves time and money, while delivering a higher value product. The flash point monitor analyzes and reports data in less than 7 minutes, versus the 4 hours it would take in the lab. The monitor provides flexibility to immediately adjust blending.

The return on investment is around \$1,500 to \$2,500 per hour or \$1.5 million per month, based on the reduction of the blend component required to meet specifications.

## LAB & ONLINE

Our process analyzers were developed based on PAC-proven laboratory technology. Our lab analyzers have been in the field delivering accurate flash point analyses for over 80 years.





## SPECIFICATIONS

General Information	
Ordering Information	45607AT-115V: Process Flash Point 100-120 VAC 45607AT-230V: Process Flash Point 220-240 VAC
Standard Test Method	Correlates to ASTM D56, ASTM D93, DIN EN ISO 2719, IP 34, DIN 51755, DIN EN ISO 13736, IP 170
Response Time	Typically 1 - 7 minutes application dependent
Measurement Ranges	10° to 121°C (50° to 250°F)*
Repeatability	+/- 1.0°C
Sample Conditions	
Sample Phase: Liquid	Sample Return: Atmospheric pressure
Sample Flowrate: 30-50 ml/minute	Sample Temperature: At least 15°C (59°F) below expected lowest flash point temperature (cooling may be required in sample conditioning system)
Sample Inlet Pressure: 5 - 10 psig	Sample Viscosity: Less than 220cSt at 38 °C (100 °F)
Supply & Connections	
Instrument Air	Clean, dry and filtered air: 600-1000 cc/minute and regulated at 10 psig
Power Requirements	
Voltage	100-120 or 220-240 VAC (+/-10%), 50/60 Hz, single phase
Power	500 W
Interface Specifications	
Remote Standby	Terminals available for customer-supplied dry contact control of instrument. Allows control room to take monitor "off-line"
Analog Output	Isolated 4-20mA for Flash Temperature (standard) Isolated 4-20mA for Sample Temperature (optional)
Alarm Relay	SPST fail-safe alarm relay
Digital Outputs	Modbus over RS-485 (standard), Ethernet over external module (optional)
"Come Read" Contact	Dry relay contact for end of measurement cycle notification (optional)
Environmental Conditions	
Operating temperature	0° to 40° C; weather protection required; no direct sunlight
Altitude	Sea level to 2,000 meters
Safety Characteristics	
USA/Canada	Class 1 Div 1 Group B, C, D, T4 Type 13,4, 4x and AEx d IIB+H2 (CSA)
Physical Specifications	
Dimensions	48 x 24 x 13 inches (uncrated); 54 x 29 x 17 inch (crated)
Weight	250 lbs (uncrated); 350 lbs (crated)

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

\* Contact PAC for other temperature ranges

### 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.

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.

### HEADQUARTERS

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