SPECIFICATIONS

General Info	
Ordering Information	OptiFPP: Automated Cold Filter Plugging Point Analyzer with built-in cooling system P/N:0118-010-001
Standard Test Methods	CFPP: EN 116, EN 16329, IP 309, ASTM D 6371, JIS K 2288 CP: In accordance with ASTM D5771, IP 444, EN 23015, EN 590 In correlation to ASTM D2500, ISO 3015, IP 219, JIS K2269 Customized: up to 5 methods (stand-alone mode); unlimited (PC connection mode)
Analytical principle	Aspiration of cooled diesel and domestic heating fuels through a filter into a volumetric pipette within 60 seconds
Cooling System	• Internal Stirling Cooling • Stepped or linear cooling profiles according to method or user defined (sample or jacket adjustable from 1°C/h to 120°C/h) • Customizable up to 20 steps
Operation	
Temperature Range	Sample: - 95°C to +51°C (-139°F to 123°F) Jacket: -105°C to + 55°C (-157°F to +131°F) Automatic control of programmable cooling steps
Sample temperature	Accuracy: 0.1°C Metal/Glass Pt100 probe IEC DIN 751 1/3 class B Automatic calibration of measurement circuit and 20 points probe correction table
Cooling temperature	Accuracy: 0.5°C Metal Pt100 probe Automatic calibration procedure
Sample volume	Around 45 ml
Calibration	Automatic temperature calibration routine. 2 to 10 points temperature probe correction table Programmable calibration frequency
Power Requirements	90-240 VAC, (+/- 10 %) V - automatic adaptation, INDOOR USE ONLY
Environmental Conditions	Operating temp: 10 to 35°C (50 to 95°F) Storage temp: -20 to 50°C (-4 to 122°F)
Frequency	50/60 Hz
Wattage	300W
Data Management	
Documentation	Real-time display on screen of test progress & graphics, Quality Control Database, Self diagnosis tools
Internal Memory	200 test runs with graphic result and cooling curve.
Quality Control Database	Control of up to 30 Quality Control products with automatic acceptance criteria; deviations and statistical quality reports. Each quality control chart can store up to 40 points. Devices calibration history and printable ticket.
PC Networking	IRIS software connection for multi-instrument networking
Printing	Personal/Network printer; 40/80 columns/PCL5
Display	7” color touch-screen
Data input/output	2 USB ports, 1 Ethernet port, 1 RS232C serial link for direct connection to LIMS or external PC
Password security	Multi-level password protection. Customer configurable
Physical Specs	
Dimensions L x W x H	700 x 454 x 350 mm (27.6 x 10 x 17.8 in) With second holder: 700 x 500 x 350 mm (27.6 x 19.7x 13.8 in)
Weight	30 kg (67 lbs) and 30.7 kg (67.7 lbs) with measurement head

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.

Our solutions are from industry-leading brands: AC Analytical Controls, Advanced Sensors, Alcor, Antek, Herzog, ISL, Cambridge Viscosity, PetroSpec and Phase Technology. We are committed to delivering superior and local customer service worldwide with 15 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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OptiFPP Brochure US Rev.4 March 2019

PAC solid partners proven solutions

OptiFPP

Easy to Use, Accurate and Reliable Cold Filter Plugging Point Analyzer

- Ultra-low temperature testing capability of diesel fuels (down to -70°C)
- Reliable and precise analysis performance
- Proven endurance for long-term operation
- Stand-alone operation and/or multi-instrument networking
- Cloud Point measurement capability with optional head
- Ergonomic cable-free testing heads

OptiFPP

COLD FILTER PLUGGING POINT TESTING FOR FUELS

The Cold Filter Plugging Point (CFPP) is a critical property that predicts the lowest temperature at which a fuel will freely flow through filters in diesel engine systems. ISL's unique OptiFPP combines a patented built-in cooling system and highly precise detection mechanism into an ultra-compact, easy to use instrument.

The ISL OptiFPP analyzer provides automated CFPP test in strict accordance to EN116 and EN16329 conditions.

The ISL OptiFPP precisely controls jacket cooling and electronically controlled vacuum adjusts as the test specimen is drawn though a mesh filter, per method conditions. Once crystal formation inhibits sample flow within a set time, a CFPP value is detected, displayed and stored to memory. Detailed reports are available, showing any abnormal points, as well as sample temperature behavior during the test.

Thanks to its flexible design, users can choose to operate the OptiFPP as a standalone unit with LIMS data transfer and auto-print capabilities that simplify documentation or as part of a multi-instrument network controlled by a PC, with PAC's IRIS Software.

An integrated cleaning stand further assists with the cleaning process and can be used while another sample is running in a separate head.

CABLE-FREE HEADS

OptiFPP's smart head contains both the electrical connections for the detector and a mechanical vacuum connection to the pipette. No longer must the user contend with tangled cables and leaky tubing.

The optional cloud point head, P/N:1209-013-001 (metal probe) or P/N: 1209-013-003 (glass probe) can be used on the OptiFPP to test any petroleum product, down to -95C (-139F), in accordance with all the international standards.

Cable-free and tube-free smart heads make set up and breakdown much easier and faster.

MULTIPLE UNITS NETWORK WITH PAC IRIS SOFTWARE

- Simple connection setup and use
- Connect lab instruments locally or from anywhere in the world
- Password protection at various levels
- User traceability
- Designed for regulatory compliance
- Integrated statistical process control charting
- Remotely control multiple instruments from a single workstation
- Customizable to meet lab specific needs
- Share printer for multiple instruments
- Centralized LIMS transfer and configuration

KEY FEATURES

SIMPLE AND PRECISE TESTING

- Compact and mobile; easily move throughout your lab
- Simple and instantaneous test initiation
- Programmable cooling profile and end of test conditions, allowing various standard and/or customized test methods
- Real-time display of test progress and results
- Integrated auto-cleaning with two solvents can be operated while separate sample is running
- Electronic vacuum control system with dynamic capabilities

BUILT-IN COOLING INCREASES POWER

- Completely self-contained, cooling system
  - enables ultra-low temperature testing
  - saves energy
  - eliminates heat, noise, external liquid connections and toxic coolant vapors
- Ability to run cloud point test with optional CP head
- Standard or customized stepped, or linear sample cooling profiles

APPLICATION RANGE

- Refining certification lab
- Independent lab

Cold Behavior:
- FAME and distillate fuels
- Diesel and biodiesel fuels
- Domestic heating fuels

RELIABLE PERFORMANCE & QUALITY COMPLIANCE

- Automatic calibration with frequency program; probe correction capabilities
- Stores time-recorded, automatic calibrations with results
- Endurance tested and proven for long-term operation