



ADVANTAGES:

- Direct Correlation to ASTM D86
- Results in Less than 10 minutes
- Proven Microdistillation Technology
- Hazardous Area Purged Enclosure
- Low Cost of Ownership

The MicroDist™ analyzer measures the distillation characteristics of hydrocarbon products in correlation with ASTM D 86 and IP-123. The MicroDist™ utilizes the technology of a fast, accurate established distillation method used in laboratory analysis. The MicroDist™ measures the vapor, liquid temperatures and percentage distilled over the boiling point curve in under 10 minutes. The cell can be flushed automatically with the sample to be tested and a special thermo-destruction cleaning cycle can be programmed to be done at scheduled intervals.

Application

The MicroDist™ is used for process optimization and product certification and control of blending processes for motor gasolines, fuel oils, naphtha and diesel. Accurate reporting of distillation points reduces product variability and waste.



MicroDist

Direct correlation with ASTM D 86

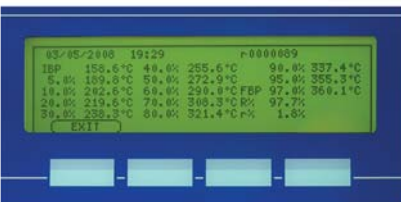
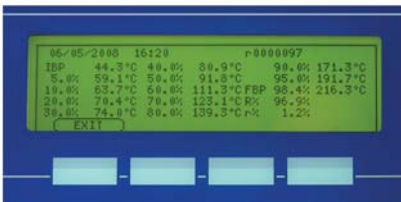
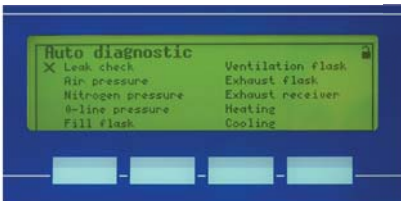
True physical distillation where correlation model to reference method is not dependent on product composition change. It is important to have an easy and accurate correlation with the D 86 method so the results of the online analyzer are validated and may be used for process control which requires a short time window.

Results in less than 10 Minutes

The MicroDist™ analyzer can provide a complete distillation run and test report in less than 10 minutes using only 10 ml of sample. The results occur in a third of the time of other physical distillation methods.



Certified explosion protected construction
Meets ATEX - Ex II 2 G Ex px IIC T4 to satisfy safety requirements. The big heavy explosion-proof housing has been replaced by an integral purge system with divided analytical and electronic sections.



Ease of Use

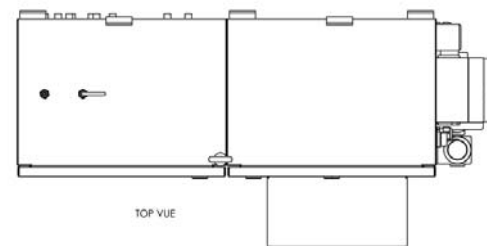
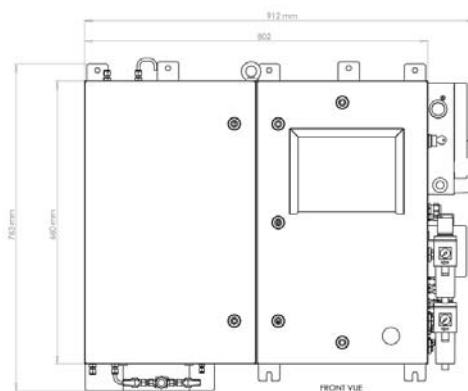
- Built-in Auto-diagnostics to prevent faulty runs. Analyzer will not initiate into run mode unless all built-in checks pass.
- No calibration required at set-up. Readily available CRMs can be used to validate the calibration on a yearly basis.
- Ruggedized flask assembly design requires no cleaning.
- No configuration change required when changing fuel streams. The MicroDist can give boiling point data for diesel, gasoline and jet fuel.
- Built-in Nitrogen generator is available and only instrument air is required for utility gas requirement.
- Graphing capability –user selectable boiling points can be displayed on front screen.

Lower Cost of Ownership

- Faster test results in half the time with no correlation needed.
- Low consumable usage with new Permaflask technology.
- Reduced gas usage and local calibration once per year.
- Direct injection calibration port saves time and effort between tests.

Specifications

Analysis Performance	
Measurement Cycle Time	Less than 10 minutes
Measurement/Temperature Range	Full boiling point curve 20-400 °C (68-752°F)
Repeatability	Equal or better than ASTM D86
Accuracy	Better than D86, IP-123, ISO 3405
Sample Requirements	
Sample return pressure	Atmospheric to < 8 bar or 120 psig (1.4 bar or 20 psig less than supply)
Sample flow rate	10-20 L/ hour (application dependent)
Sample temperature	Min. 15°C below IBP without cooler Max. 30 °C above IBP, application dependent with cooler
Sample pressure	2 - 10 bars (30-145 psi)
Enclosure/ Installation and Requirements/Utilities	
Dimensions	L: 802 mm X H: 660 mm X W: 320 mm (31.5 in. X 26 X12.6)
Weight	75 kg (165 lb.)
Operating Temperature	10°C to 40°C, non-condensing
Enclosure/Rating	IP 65
Area Classification	NEC Class 1 Division 1 Groups B, C & D, UL/CSA pending or ATEX - Ex II 2 G Ex px IIC T4
Power	115 VAC/6A max, 50/60Hz, 700W 230 VAC/3A max, 50/60Hz, 700W
Cabinet Purge Gas	Air, > 150 l/min (5.3 SCFM), minimum 5 bars (72 psi)
Inert Gas	Nitrogen, inlet pressure 6-10 bars
Installation Site	Avoid direct sun light and provide rain-proof shelter for outdoor installation
End User Connections	
Analog Output Signal	Isolated (4) 4-20mA outputs for selected distillation cut point values
Digital Input/Outputs	8 digital inputs, 8 digital outputs, user assignable
Serial Input/Output Signal	Single RS232 or RS485 bi-directional, Modbus for full curve
Options available	
Nitrogen generator	Required if no Nitrogen supply
Multi-stream	Up to 3 streams available
Sample cooling	For low IBP (gasoline applications)
Stand option	Stand with Wheels
Wall stand option	Wall stand option
Additional I/O board	Adds additional 8 digital inputs and 8 digital outputs, user assignable
Additional 4-20 mA output board	Adds 4 additional 4-20 mA analog outputs, user assignable
Optional flame arresters	For atmospheric and vapor vents





Global Solutions and Support

PAC Service

Count on certified service professionals from PAC

Installation & On site support

Preventive maintenance & Phone Support

Calibration & Training courses

Offer around the clock services, global coverage, and flexible service plans.

PAC Genuine Parts

Insist on PAC Genuine Parts to protect your warranty and ensure compliance,
while achieving precise, consistent analysis.



www.paclp.com

PAC is an international manufacturing and service organization with a portfolio that spans petroleum, petrochemical, biofuels, environmental, food and beverage, pharmaceutical and industrial analysis solutions. PAC provides advanced testing equipment for laboratory, process on-line and field use from small to the largest enterprise businesses. PAC offers analytical solutions for a wide variety of applications, including: chromatographic systems and detectors, elemental, laboratory, and on-line process analyzers, software applications, and spectroscopy. More information about PAC is available at www.paclp.com