



Full Range of SIMDIS Solutions

Simulated Distillation Solutions for True Boiling Point Determination up to C120

- Workflow oriented, user-friendly SIMDIS XLNC™ software
- Turn-Key solutions for all sample types
- Includes calibration and system performance check samples and all calculations
- © Compliant with global standard test methods.

SIMDIS Solutions

COMPLETE RANGE OF SIMULATED DISTILLATION ANALYSIS SOLUTIONS UPTO C120

Boiling point data is a major specification in characterizing petroleum streams. PAC provides complete, turn-key gas chromatographic solutions for accurate determination of true boiling point data - from naphtha up to crude oil samples. By completely automating every step in the analysis, AC SIMDIS applications provide fast and accurate boiling point results.

PAC adds unique value to the industry by offering a 100% guaranteed solution, delivered fully factory calibrated, tested to certified reference materials, fine-tuned fully dedicated to methods specified by the user. PAC qualified service engineers commission the instrument and provide operator/user training.

IN FULL COMPLIANCE WITH WOLRDWIDE STANDARD TEST METHODS

PAC's dedicated involvement in regulatory organizations guarantees that the system and the software calculations are in accordance with with accepted methods (ASTM, IP, ISO, DIN & others) listed in gasoline, jet fuel and diesel specifications.

KEY ADVANTAGES

BETTER HARDWARE, SMARTER SOLUTIONS

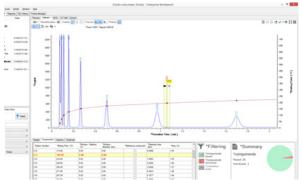


- Temperature Programmable Inlet. Recognized "Best in Market" inlet for Simulated Distillation. Easy to maintain, with Septum Purge for clean repeatable baselines
- Light Solvent Optimized Automated Liquid Sampler(ALS): Improves injection precision by optimized cooling , optimizes airflows around sample trays in ALS (lowering temperature)
- AC CNS SIMDIS: Dedicated analyzer for simultaneous determination of boiling range distribution of Carbon, Nitrogen, and Sulfur in crudes as such or in final products
- AC 8634[™] Analyzer: For accelerated D86 correlation data of jet fuel and diesel
- AC Crude Oil analyzer: For more accurate data. Combines D7169 High temp SIMDIS results with D7900 DHA FE results, avoiding D7169 CS2 related quenching
- SIMDIS XLNC Software:
 - Compatible with major Chromatography Data Systems (tested with Openlab, EZChrom, Chemstation, ChromPerfect, Chromeleon, Galaxie, CompassCDS, Atlas.
 - Supports Spanish, Chinese, Portuguese, Russian, Korean and French languages.

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EASY OPERATION FOR ACCURATE ANALYSIS

- Fast, Work-flow, oriented intuitive interface (one-click access, drag-and-drop, smart filter)
- Configurable import, processing, reporting and LIMS transfer of results.
- Automated Blank subtraction, calibration and system validation
- Define Different Test Methods and Product Definitions
- Start and End elution algorithm, Solvent Detection&Exclusion
- Customizable QC and Calibration Definitions, graphical QC results (instant pass/fail view)
- Drag&Drop DHA Crude Merge function
- Audit Trail and tracking of linked data files.



INTELLIGENT NEW HARDWARE

NEW AGILENT 8890 GC PLATFORM KEEPS YOU IN CONTROL



The AC SIMDIS analyzer is now available on the new Agilent 8890 GC Platform.

Intelligent capabilities built into the Agilent 8890 GC give you the freedom to work with your GC... not on it. These capabilities can also grow over time as your analytical needs change—so you can keep your lab moving toward a successful future.



Intuitive touch screen interface

This new and intelligent GC platform simplifies life inside the lab by giving you real-time acess to instrument status and information. The home screen provides updates on the system at-aglance and allows you to customize frequently used setpoints for quick accessibility



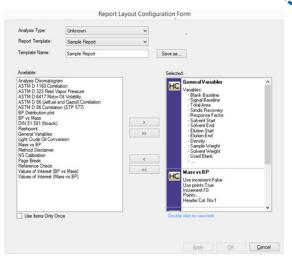
Check your lab anytime, from anywhere!

Now you don't have to be in your lab to make sure that things are running smoothly. Mobile access features let you view setup information, troubleshoot problems, pause and start sample runs among other controls!

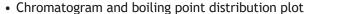


DEDICATED CORRELATIONS AND CALCULATIONS

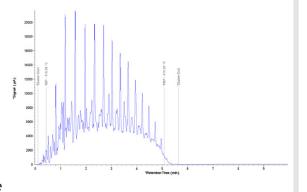
- Correlation to D86 (Physical Distillation) for Jet Fuel and Diesel
- Correlation to D86 according STP-577
- Correlation to D1160
- NOACK according DIN 51581-2
- Motor Oil Volatility (MOV) according ASTM D6417
- Reid Vapor Pressure (RVP) according ASTM 323
- Light Crude Oil Volume conversion
- Customizable Cut points (temperature and %OFF)
- Flashpoint according ASTM D7215
- Volume Average Boiling Point (VABP)
- Bureau of Mines Correlation Index (BMCI)
- Average Molar Mass
- Specific reports for CNS (Sulfur and Nitrogen SIMDIS



EXTENSIVE SIMDIS REPORT OPTIONS, FULLY CONFIGURABLE PER PRODUCT/TEST



- BP vs %OFF, Recovery for non-eluting samples
- Retention Time or Boiling point x-axis, Temperature in °C/F
- Overlays of (corrected) Sample, Blank, Calibration chromatogram, BP plot, Cut points, Carbon number
- All Correlations and Specific Calculations
- QC Reference check-report
- DHA Crude Merge Report
- Specific CNS reporting
- Peak skew and column resolution parameters
- Output of report to several formats, such as CSV/Excel, PDF file, or copy-to-clipboard for reviewing the results outside the SIMDIS software







SPECIFICATIONS

ORDERING INFORMAT	ION											
SINGLE CHANNEL	GCG2123.894A/C SIMDIS D2887 SYSTEM ON 120V/230V 8890 GC, INCLUDES AC FAST SIMDIS AND AC8634											
SYSTEMS	GCG2123.886A/C SIMDIS HT 750 SYSTEM ON 120V/230V 8890 GC											
	GCG2123.891A/C SIMDIS D7096 SYSTEM ON 120V/230V 8890 GC											
	GCG2123.892A/C SIMDIS D7213 SYSTEM ON 120V/230V 8890 GC											
DUAL	GCG2125.8	386A/C	DC SIMDIS	HT 750 SYST	EM ON 120V/2	30V 8890 GC						
CHANNEL SYSTEMS	GCG2125.891A/C DC SIMDIS D7096 SYSTEM ON 120V/230V 8890 GC											
	GCG2125.892A/C DC SIMDIS D7213 SYSTEM ON 120V/230V 8890 GC											
	GCG2125.894A/C DC SIMDIS D2887 SYSTEM ON 120V/230V 8890 GC, INCLUDES AC FAST SIMDIS AND AC8634											
*Additional SIMDIS Ch	annels are	available u	pon request	(other char	nnel must also	o be SIMDIS)						
ANALYSIS PERFORMA	NCE											
Precision	According specific method or better											
Sensitivity	According specific method or better											
Accessories included	Operating manual; Calibration samples; Reference samples; Startup kit; Carrier gas filters; Oven exhaust deflector; Column											
UTILITIES & REQUIRE	MENTS											
Carrier gas	According specific method or better According specific method or better According specific method or better Operating manual; Calibration samples; Reference samples; Startup kit; Carrier gas filters; Oven exhaust deflector; Column MENTS Helium or Nitrogen Hydrogen (99, 999%) Compressed air (99, 999%) Liquid nitrogen, or CO ₂ (depending on method) for fast cooling 110-230V D3710 D7096 D2887 D5307 D5442 D7213 D7398 D6352 D7169 D7500 C15 C16 C44 C44 C44 C60 C60 C90 C100 C110 Gasotine Raphta Naphta Diesel Crude Oil Petroleum derived waxes base stocks Biodiesel blends FBP FBP FBP FBP FBP N.a FBP (100°C) (1388°C) (138											
FID Fuel	Hydrogen (99.999%) Nitrogen (99.999%) Compressed air (99.999%)											
	Liquid nitrogen, or CO ₂ (depending on method) for fast cooling											
Cooling	Liquid nit	` `		ing on meth	od) for fast c	ooling						
Cooling System power	Liquid nit	` `		ing on meth	od) for fast c	ooling						
		` `		ing on meth	od) for fast c	ooling						
System power		` `		ing on meth	od) for fast c	ooling D7213	D7398	D6352	D7169	D7500		
System power METHOD OVERVIEW	110-230V D3710	D7096	O ₂ (depend	D5307	D5442	D7213		D6352 C ₉₀				
System power METHOD OVERVIEW ASTM	110-230V	rogen, or C	O ₂ (depend				D7398 C ₆₀ FAMEs Biodiesel blends		D7169 C ₁₀₀ Residue Crude oil	C ₁₁₀ Distillates Base Oils Lubricating		
System power METHOD OVERVIEW ASTM Max. Carbon number	110-230V D3710 C ₁₅ Gasoline	D7096 C ₁₆ Gasoline	D2887 C ₄₄ Jet Fuel	D5307 C ₄₄	D5442 C ₄₄ Petroleum derived	D7213 C ₆₀ Lube oil	C ₆₀ FAMEs Biodiesel	C ₉₀	C ₁₀₀ Residue	C ₁₁₀		
System power METHOD OVERVIEW ASTM Max. Carbon number Sample Range	D3710 C ₁₅ Gasoline Naphta FBP <260°C	D7096 C ₁₆ Gasoline Naphta FBP <280°C (536F)	D2887 C ₄₄ Jet Fuel Diesel FBP <538°C (1000F)	D5307 C ₄₄ Crude Oil n.a	D5442 C ₄₄ Petroleum derived waxes FBP <538°C	D7213 C ₆₀ Lube oil base stocks IBP >100°C (212F) FBP >615°C	C ₆₀ FAMEs Biodiesel blends IBP >538°C (1000F) FBP >700°C (1292F)	C ₉₀ Lube oil base stocks IBP >174°C (345F) FBP >700°C	C ₁₀₀ Residue Crude oil FBP <720°C (1328F)	C ₁₁₀ Distillates Base Oils Lubricating Base Stock IBP >100°C (212F) FBP >735°		
System power METHOD OVERVIEW ASTM Max. Carbon number Sample Range Boiling range sample OTHER METHODS	D3710 C ₁₅ Gasoline Naphta FBP <260°C (500F)	D7096 C ₁₆ Gasoline Naphta FBP <280°C (536F)	D2887 C ₄₄ Jet Fuel Diesel FBP <538°C (1000F)	D5307 C ₄₄ Crude Oil n.a	D5442 C ₄₄ Petroleum derived waxes FBP <538°C (1000F)	D7213 C ₆₀ Lube oil base stocks IBP >100°C (212F) FBP >615°C (1138F) IP 507 / EN	C ₆₀ FAMEs Biodiesel blends IBP >538°C (1000F) FBP >700°C (1292F)	C ₉₀ Lube oil base stocks IBP >174°C (345F) FBP >700°C (1292F) IP 545 / EN	C ₁₀₀ Residue Crude oil FBP <720°C (1328F)	C ₁₁₀ Distillates Base Oils Lubricating Base Stock IBP >100°C (212F) FBP >735°C		
System power METHOD OVERVIEW ASTM Max. Carbon number Sample Range Boiling range sample	D3710 C ₁₅ Gasoline Naphta FBP <260°C (500F)	D7096 C ₁₆ Gasoline Naphta FBP <280°C (536F)	D2887 C ₄₄ Jet Fuel Diesel FBP <538°C (1000F)	D5307 C ₄₄ Crude Oil n.a N 15199-1	D5442 C ₄₄ Petroleum derived waxes FBP <538°C (1000F)	D7213 C ₆₀ Lube oil base stocks IBP >100°C (212F) FBP >615°C (1138F)	C ₆₀ FAMEs Biodiesel blends IBP >538°C (1000F) FBP >700°C (1292F)	C ₉₀ Lube oil base stocks IBP >174°C (345F) FBP >700°C (1292F)	C ₁₀₀ Residue Crude oil FBP <720°C (1328F)	C ₁₁₀ Distillates Base Oils Lubricating Base Stock IBP >100°C (212F) FBP >735°		

rib ruet	Nitrogen (Nitrogen (99.999%) Compressed air (99.999%)												
Cooling	Liquid nitrogen, or CO ₂ (depending on method) for fast cooling													
System power	110-230V													
METHOD OVERVIEW														
ASTM	D3710	D7096	D2887	D5307	D5442	D7213	D7398	D6352	D7169	D7500				
Max. Carbon number	C ₁₅	C ₁₆	C ₄₄	C ₄₄	C ₄₄	C ₆₀	C ₆₀	C ₉₀	C ₁₀₀	C ₁₁₀				
Sample Range	Gasoline Naphta	Gasoline Naphta	Jet Fuel Diesel	Crude Oil	Petroleum derived	Lube oil base stocks	FAMEs Biodiesel	Lube oil base stocks	Residue Crude oil	Distillates Base Oils				

Max. Carbon number	C ₁₅	C ₁₆	C ₄₄	C ₄₄	C ₄₄	C ₆₀	C ₆₀	C ₉₀	C ₁₀₀	C ₁₁₀		
Sample Range	Gasoline Naphta	Gasoline Naphta	Jet Fuel Diesel	Crude Oil	Petroleum derived waxes	Lube oil base stocks	FAMEs Biodiesel blends	Lube oil base stocks	Residue Crude oil	Distillates Base Oils Lubricating Base Stocks		
Boiling range sample	FBP <260°C (500F)	FBP <280°C (536F)	FBP <538°C (1000F)	n.a	FBP <538°C (1000F)	IBP >100°C (212F) FBP >615°C (1138F)	IBP >538°C (1000F) FBP >700°C (1292F)	IBP >174°C (345F) FBP >700°C (1292F)	FBP <720°C (1328F)	IBP >100°C (212F) FBP >735°C (1355F)		
OTHER METHODS			IP 480 / EI	N 15199-1	/ DIN 51.435	IP 507 / EN	15199-2	IP 545 / EN	15199-3	99-3		
Max. Carbon number			C ₁₂₀			C ₁₂₀		C ₁₂₀				
Sample Range	Jet Fuel,	Diesel	Lube oil ba (totally eli			Residue	Crude oil					
Boiling range sample	FBP <538°0	C (1000F)	IBP >100°C (212F) FBP >750°C (1382F)			IBP >100°C (212F) FBP >750°C (1382F)		IBP >174°C (345F) FBP >750°C (1382F)				

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

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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.