PAC | solid partners proven solutions



Antek MultiTek®

Total Sulfur, Total Nitrogen, and Halides Analysis in a Single Solution

- Application Specific Configuration Provides Excellent Precision and High Quality Data
- Increased Lab Productivity through Reduced User Intervention
- High Performance for Versatility and Quick Analysis
- Proven Compliancy for Multiple Industries

MultiTek®

INNOVATIVE PROCESS SOLUTION FOR GAS, LPG, AND LIQUID SAMPLES UTILIZING PROVEN LAB TECHNOLOGY

Antek's MultiTek® is the leading instrument on the market that combines testing for sulfur, nitrogen, and halides all in one. Compact, powerful, automated, and multi-configurable, it's the perfect solution to today's increasing demand worldwide for fast, accurate detection and analysis of unwanted chemicals, pollutants, contaminants, and corrosive elements. MultiTek® detects these substances through a uniquely efficient process that includes combustion Ion Chromatography (IC), Ultraviolet Fluorescence (UVF), and Chemiluminescence technologies.

MultiTek® is superior to wet chemistry and XRF; works with solid, liquid, gas, and LPG samples; and provides lower detection levels than competitive systems. MultiTek® is the enabling technology for continual product and process improvement and 'green' manufacturing goals.

KEY ADVANTAGES

HIGH PERFORMANCE FOR VERSATILITY AND QUICK ANALYSIS

MultiTek Analyzes a Wide Application Range all in one Instrument

- Quick analysis of various sample types
- MultiTek is able to analyze solids, liquids, and gases quickly and accurately
- Long term stability for continuous use

IMPROVED LAB PRODUCTIVITY THROUGH REDUCED USER INTERVENTION

- Factory tuned analyzer; the instrument is ready for method development once installed
- With optional customized applications development, operators do not need to spend time to develop methods
- High capacity liquid autosampler (216 samples) reduces need for operators to be present when running samples
- Long term stability reduces calibrations by operators for any measurement range

PRECISE ANALYZER FOR HIGH QUALITY DATA

Application Specific Configuration Provides Excellent Precision

- Dedicated sample analyzer means that your analyzer can truly be optimized for its intended application; can be configured for multiple applications
- PAC application specialists can develop customized methods (no on-site method development needed)
- Factory-tuned analyzer prior to shipment

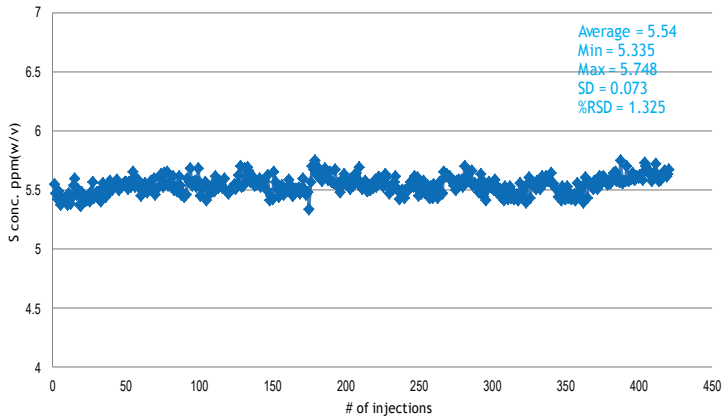
PROVEN COMPLIANCY FOR MULTIPLE INDUSTRIES

- Low detection limits ensures regulatory and quality requirements
- Wide application range helps multiple industries meet standards requirements

ASTM D7359	ASTM D7183	EN 20846
ASTM D5453	ASTM D7184	UOP 971, 936
ASTM D6667	ASTM D7551	ENV 12260
ASTM D6069	ASTM D 5176	DIN 38409
ASTM D4629	ASTM D5762	

MULTITEK® ANALYSIS

Long Term Stability Test



MultiTek long term stability for continuous use

Applications	# Injections	Results PPM	RSD%
Sulfur Analysis			
Diesel	10	6.4	2.0
Gasoline	10	10.2	1.25
Biodiesel	10	7.2	1.42
Aromatic Hydrocarbons	4	0.85	4.94
LPG	4	50.6	0.24
Mineral Oil	6	10.3	2.6
Nitrogen Analysis			
Lubricating oils	7	830	2.00
Food	4	79.5	2.84
Polymer	3	2057	2.49
Liquid Aromatics	40	0.441	3.8
Fuel Oil	10	617	1.06
Halides Analysis			
Fluorides in Aluminium Oxide	7	54 PPM	3.27
Chlorine in Naphta	20	1.09 mg/L	0.03

Typical results. Results will vary based on your specific instrument conditions

MULTITEK APPLICATIONS

HPI Applications

Sulfur Analysis

- LPG
- Condensates
- Naphtha
- Diesel
- Aromatics
- Natural Gas
- Mineral Oil
- Gasoline
- Gaseous Hydrocarbons
- Jet Fuel

Halides Analysis

- Naphtha

Nitrogen Analysis

- Naphtha
- Condensates
- Distillates
- Oils
- Liquid Hydrocarbons
- LPG
- Light Aromatics
- Lubricating oils

Non-HPI Applications

Sulfur Analysis

- Water
- Wastewater
- Food
- Polymer
- Ethyl Alcohol

Nitrogen Analysis

- Water
- Wastewater
- Food
- Polymer
- Ethyl Alcohol

Halides Analysis

- Coal
- Aluminium Oxide

SPECIFICATIONS

Detection Method		
MultiTek® N Nitrogen Analyzer	Pyro-chemiluminescence	
MultiTek® S Sulfur Analyzer	Pyro-fluorescence	
MultiTek® IC Halides Analyzer	Combustion IC	
Analytical Range	**Range**	**LOD[1]**
MultiTek® N Nitrogen Analyzer	Low ppb to wt%	15 ppb
MultiTek® NS Nitrogen Analyzer	Low ppb to wt%	N: 30ppb/ S: 100 ppb
MultiTek® S Sulfur Analyzer	Low ppb to wt%	100 ppb
MultiTek® LLS Sulfur Analyzer	Low ppb to sub wt%	30 ppb
MultiTek® IC Halides Analyzer	Low ppb to sub wt%	500 ppb
Typical Sample Size[2]		
GAS	5 to 15 ml	
LPG	5 to 15 µl	
Liquids	1 to 40 µl	
Solid	Up to 500 mg	
Typical Analysis Time		
Gases / Liquids	2-5 minutes (dependent upon sample type / method)	
Solids	2 - 15 minutes (dependent upon sample type / weight)	
Halides	15 - 30 minutes	
Temperatures		
Combustion Zone	Ambient to 1100°C in 1°C increments - 1050°C default	
Gases		
Dry Oxygen	400 - 650 ml/min, 99.75%, 3 bar (40 psig), < 5 ppm moisture	
Dry carrier (argon or helium)	50 - 200 ml/min, 99.99%, 3 bar (40 psig), < 5 ppm moisture	
Water	18 mega ohm, Type 1 H_2O	
Miscellaneous Specifications		
Power	115 vac 50/60 Hz 1500 W 230 vac 50/60 Hz 1500 W	
Dimensions (hxwxd)	52x54x61cm, 21x21x24inch	
Weight	37 kg (80 lb)	

Note: LOD and range are determined with water and/or solvents at optimal conditions. These will vary based on the matrix and instrumental conditions. Refer to the appropriate MultiTek Application Note for LOD and range for a specific material of interest

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, 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

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

Contact us for more details.

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

Copyright © 2016 PAC L.P. All rights reserved / Revision 2016.1