#### LABORATORY EQUIPMENT OVERVIEW

Analyzer Model/Specifications	SuperC AMF	2010L	9600L	9600L Gold
Total Chlorides (UOP 930-07)	N/A	OPTIONAL	OPTIONAL	Х
Total Sulfur ASTM D4045,D4468 (default impurity)	N/A	Х	Х	x
Nitrogen Oxides (NOx)	N/A	N/A	OPTIONAL	OPTIONAL
Elemental Analysis ASTM D4084	Х	Х	OPTIONAL	x
High Temp furnace Regeneration	N/A	N/A	OPTIONAL	x
Windows Based CI Smart controls software	х	х	x	x
Dual range injection loop	OPTIONAL	OPTIONAL	×	×
Digital Flow control	х	OPTIONAL	Х	x
Sample pump (Gas Bag samples)	OPTIONAL	OPTIONAL	OPTIONAL	x
Liquids	N/A	OPTIONAL	OPTIONAL	x
Dry Colorimetric detector	х	х	x	x
Desktop Computer	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
Laptop Computer	х	Х	Х	x
Model 210 Gas & liquids syringe injector	N/A	OPTIONAL	OPTIONAL	х
Model 960 AMF Cali-blend gas generator	OPTIONAL	OPTIONAL	OPTIONAL	x
Model 9610 Liquid auto injector	N/A	OPTIONAL	OPTIONAL	×
LPG Station	N/A	OPTIONAL	OPTIONAL	х
Built in LPG	OPTIONAL	N/A	N/A	N/A
LIMS Compatible	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL

## LAB AND PROCESS ANALYZERS

#### **ELEMENTAL APPLICATIONS**

Impurity	LDL (Gas,LPGs)*
Ammonia (NH <sub>3</sub> )	30 ppb
Arsine (AsH <sub>3</sub> )	1 ppb
Chlorine (Cl <sub>2</sub> )	5 ppb
Hydrogen Chloride (HCI)	200 ppb
Hydrogen Cyanide (HCN)	50 ppb
Hydrogen Fluoride (HF)	500 ppb
Hydrogen Sulfide (H <sub>2</sub> S)	1 ppb
Nitrogen Dioxide (NO <sub>2</sub> )	5 ppb
Phosgene (COCI <sub>2</sub> )	1 ppb
Phosphine (PH <sub>3</sub> )	1 ppb
Sulfur Dioxide (SO <sub>2</sub> )	20 ppb
Other	Contact us

#### **TYPICAL APPLICATIONS**

Impurity	LDL (Gas,LPGs)*	LDL(Liquids)*	
Total Sulfur	1 ppb	0.1 ppm	
Total Chlorides	200 ppb	0.5 ppm	
Nitrogen Oxides(NO <sub>x</sub> )	5 ppb	-	
Other	Contact us		



- t. 450.658.4965
- f. 450.658.3428
- e. info@cianalytics.ca
- w. cianalytics.com
- a. 2085 Industrial blvd., Chambly, Quebec, Canada J3L 4C5





# LABORATORY ANALYZERS



Find your personalised solution with us

#### **CIANALYTICS LABORATORY ANALYZERS**

CI Analytics takes pride in providing you with the very best in high-performance laboratory instruments. With over a decade of experience, delivering custom products to satisfied customers. CI analyzers are designed to ensure consistent, accurate results each and every time. All our products can be customized to your specific requirements.

The following table provides an overview of CI Analytics' laboratory equipment. Refer to individual product flyers for more information and technical specifications.

#### **TECHNICAL SPECIFICATIONS**

Analyzer Model/Specifications	9600L GOLD	9600L	2010L	SUPERC AMF
Available Applications	ALL-IN-ONE Includes most applications from Typical & elemental Tables	Choose from: Typical application (1) Elemental (3)	Choose from: Typical application (1) Elemental optional	One choice of elemental
Repeatability	Better than ± 2% F.S.*	Better than	Better than ± 2% F.S.*	
Stability	Automatic zero offset compensation before every analysis			
Sample Phase	Gas, Liquids, LPGs (with LPG option)			Gas, LPGs (with LPG option)
Analysis Time	30 seconds to 20 minutes (based upon required accuracy, sample phase and target concentration)			
Detection Technique	Advanced Dry Colorimetric Sensi-Tape <sup>®</sup> with Tri-Color adaptive optics block			
Calibration	Manual or Software-assisted calibration with 960AMF Cali-Blend Gas Generator			
Preheater Temperature	77°F to 1112°F (25°C to 600°) N/A			
Reactor Temperature	77⁰F to 2012⁰F (25⁰C to 1100⁰C)			N/A
External Outputs	USB and C.I. Net Expansion Port, Ethernet Port, MODBUS (Optional)			
User Interface	Microsoft Windows $^{\circ}$ - based CiSmart software with external laptop or desktop computer			
Power Requirements	110, 120, 220 or 240∖	AC 50/60Hz, 2400VA	110, 120, 220 or 240 50/60Hz, 2400VA	120 or 240VAC 50/60 Hz, 100VA
Dimensions (H x W x D)	23" x 35"x 23" (59 cm x 89 cm x 59 cm)			23" x 35"x 23" (59 cm x 89 cm x 59 cm)
Approximate Weight (option dependent)	280 lbs	(113kg)	280 lbs (113kg)	54 lbs (25 kg)

\* Repeatability ± 2% F.S. with MFC option, ± 5% F.S. standard

\* This publication is not intended to form the basis of a contract. CI Analytics reserves the right to amend the design and specifications of instruments without prior notice



#### MODEL 9600L & 9600L GOLD

The 9600L is our premium product in lab analysis. It contains the best and most innovative technologies available. Features, such as a multiple impurity detection and dual range capability, equip your lab to be prepared for tomorrow's stringent environmental and quality standards. The 9600L GOLD comes standard with digital flow control and a special accessory package.

#### **MODEL 2010L**

Our 2010L Lab Analyzer provides you with the fundamentals. Equipped with a laptop computer and C.I. net expansion port, it successfully answers your needs. This low-maintenance analyzer will provide repeatable and accurate results. Digital mass flow controls and a full line of accessories are available as options.

#### MODEL SUPERC AMF

SuperC AMF is a fully automated multi-element analyzer. It allows the precise quantification of multiple impurities in gas, LPGs and low-pressure samples. Digital flow control enables the SuperC AMF to detect ultra low levels of impurities in polymer-grade ethylene, propylene and light hydrocarbons. The SuperC AMF can analyze up to eleven (11) different impurities.

#### **MODEL 960AMF CALIBRATION BLEND GENERATOR**



A fully-automated, multi-compound calibration blend generator that provides you with maximum flexibility and accuracy when calibrating. The 960AMF can be used as a stand-alone unit to calibrate other analyzers or be controlled from your analyzer's CiSmart Software for maximum ease of use.

### **MODEL 210 GAS & LIQUID SYRINGE AUTO-INJECTOR**

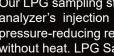
Provides constant-rate syringe injection of liquid or gas samples. The Model 210 is designed for very small sample volumes and slow injection speed. It is configurable from the CiSmart Software. The Model 210 offers a wide selection of syringe adapters for standard Hamilton syringes of 10µl up to 10000µl.

#### **MODEL 9610 LIQUID AUTO-INJECTOR**

The Model 9610 provides intermittent injections of your sample into the analyzer. Its sample introduction rate is both precise and accurate, eliminating the possibility of human error. This unit is used when performing Total Sulfur or Total Chlorides analysis on models 2010L and 9600L. The 9610 is ideal when large sample volumes are available.

#### LPG SAMPLING STATION











Our LPG sampling station is designed to provide a low-pressure, gas-phase sample into the analyzer's injection system. The LPG Sampling Station provides an electrically-heated pressure-reducing regulator with an adjustable set point. The regulator can also be operated without heat. LPG Sampling capability is available as a built-in option with our SuperC AMF.