# HI903 | Quick Selling Guide



**Petrochemical Analysis** Hydrocarbons, Crude Oil, Lubricating Oil, Solvents, and Petroleum Products

## Food, Dairy and Beverage Analysis

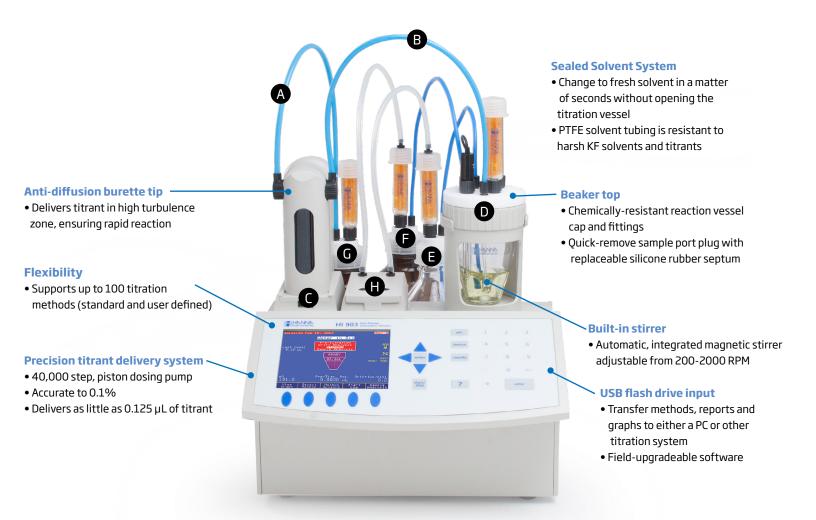
Dairy, Honey & Molasses, Sauces, Salad Dressings, Spices, Sugars, Fats & Oils, Beverages, Fruits & Vegetables, Animal Feed, Chocolate, Coffee, Cocoa, Cereal Products, Baked Goods, Pasta, and Meat Products

## **Pharmaceutical Analysis**

Ointments, Creams, Shampoo, Soaps, Topicals, Compounds, Oils, Dietary Supplements, and Vitamins



# Measures $100 \, ppm$ to 100% water content



- A. Aspiration Tube
- B. Dispensing Tube
- C. Burette AssemblyD. Beaker Assembly
- с. г
- E. Waste Bottle
  - F. Solvent Bottle
- G. Titrant Bottle
- H. Air Pump



**Clip-Lock™ Exchangeable Burette System** It only takes a few seconds to exchange the reagent burettes to perform a different titration



**Ultra-High Precision Titrant Delivery System** Optically regulated magnetic stirring, sophisticated endpoint determination, dynamic dosing and background drift correction algorithms



Easy Upgrades Field upgradable software via USB Convenient for saving data



8	Setup T	itration	n Report	
Select	fields t	o be saved	d in the r	eport.
* Titra * Stand * End F * Titra * Date * Titra * All [ Metho Compa Opera		hod le Size ume ation ed By ts ters		
nselect	Escape	Save Report	Page Up	Page Down

#### **Customizable Reports**

• Titration reports are fully customizable

# **On-screen Features**

	Reu	view Res	ult	
	HI903 -	Titration	Report	
Method Time 6 Titrati	Date:	tdz 5mg/mL 12:24	Nov 19,	
Nr 0 1 2 3 4 5		0 330.5 0 330.4 2 330.4 2 330.4 2 330.4 2 330.4		ime 00:00 00:01 00:03 00:04 00:06 00:07
View Graph	Escape	Print Report	Page Up	Page Down

#### **Titration Reports**

• Titration results can be viewed on-screen or transferred to a USB storage device

<mark>ا</mark> 700 -	<mark>)raph of</mark> V_Potent	Titrat	ion Dat	a
100 0 KF_00008.	0.8	1.6 2 Volume		
	Escars	View Report	Save as Bitmap	

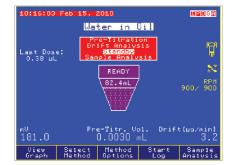
#### **Titration Graphs**

• Titration graphs can be viewed onscreen or saved as images and transferred along with titration report

	Titra	tion Me	thods	irusr
Select ·	the metho	od to be a	activated.	
HIS002 HIS012 HIS012 HIS102 HIS102 HIS102 HIS102 HIS102 HIS102 HIS103 HIS103 HIS103	2EN Stdz 3EN Stdz 1EN Stdz 1EN Mois; 2EN Mois; 3EN Mois; 4EN Surs; 6EN Mois; 6EN Mois; 8EN Mois; 8EN Mois;	2mg/mL w/ 1mg/mL w/ 5mg/mL w/ ture in Da ture in Mi ture in Ho ace Moistu	/ water St / Tartrate airy Cream lik prey ure - Suga poking Dil poking Dil poking Dil suter ayonnaise nampoo	ar
Select	New Method	Reset to Default	Page Up	Page Down

#### Methods

• The HI903 comes with a standard method pack



# Standby

• The HI903 keeps the solvent dry between samples and corrects for water entering the cell (drift rate)

Sam	ele (	Analysi	s Result	. WRUSM
		13		
	litra	tion Comp	leted	
Analysis Duration: 03:47 [mm:ss]		[mm:ss]		
Drift Value: 3.2		3.2	µ9∕min	
Sample Size: 7.0219 g				
Titrant Concentration: 1.0000 mg/mL				
			-	
Volume Delivered: 0.9904 mL			9904 mL	
Report ID: KF_0003		_00033		
Es	саре	View Report		Average Results

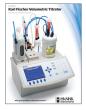
#### Results

• Titration results are displayed with links to average results or a user-customized report



View Web Page Click Here >>

# HI903 Resources



View Pdf Brochure >>



View Video >>



# **HI 903 Specifications**

Range	100 ppm to 100%
Resolution	1 ppm (0.0001%)
Result Units	%, ppm, mg/g, µg/g, mg, µg, mg/mL, µg/mL, mg/pc, µg/pc
Sample Type	liquid or solid

# Determination

Pre Titration Conditioning	automatic
<b>Background Drift Correction</b>	automatic or user selectable value
Endpoint Criteria	fixed mV persistence, relative drift stop or absolute drift stop
Dosing	dynamic with optional pre-dispensing rate
Result statistic	mean, standard deviation

# Clip Lock™ Exchangeable Burette System

<b>Dosing Pump Resolution</b>	1/40000 of the burette volume (0.125 $\mu L$ per dose)
Dosing Pump Accuracy	±0.1% of full burette volume
Syringe	5 mL precision ground glass with PTFE plunger
Valve	motor driven 3-way, PTFE liquid contact material
Tubing	PTFE with light block and thermal jacketing
Dispensing Tip	glass, fixed position, anti-diffusing
Titration Vessel	conical with operation volume between 50-150 mL
Solvent Handling System	sealed system, integrated diaphragm air pump

#### Electrode

Type / Connection	dual platinum pin, polarization electrode / BNC
Polarization Current	1, 2, 5, 10, 15, 20, 30 or 40 μA
Voltage Range	2 mV to 1000 mV
Voltage Resolution	0.1 mV
Accuracy (@25°C/77°F)	±0.1 mV

# **External Stirrer**

<b>Peripheral Devices</b>	
Resolution	100 rpm
Speed	200-2000 rpm
Туре	magnetic, optically regulated, digital stirrer

# F

PC	easily view, transfer, print or delete methods and reports via HI900PC application
USB Flash Drive	easily upgrade software or transfer methods and reports between devices using a USB drive
Laboratory Analytical Balance	RS232 to connect any laboratory balance
Printer	print directly from the HI 903 to a printer via parallel port
Monitor	instrument status and titrations can be viewed on a larger screen using any VGA compatible external monitor
Keyboard	alphanumeric text can be entered using an optional PS/2 keyboard

# **Additional Specifications**

Graphic Display	5.7" (320 x 240 pixel) color LCD
Titration Methods	up to 100 (standard and user) methods
Data Storage	up to 100 complete titration reports and drift rate reports can be stored
GLP Conformity	Good Laboratory Practice and instrument data storage and printing
Languages	English, Portuguese and Spanish
Enclosure Material	ABS plastic and steel
Keypad	polycarbonate
Power Supply	"-01" model: 115VAC, 50/60 Hz; "-02" model: 230VAC, 50/60 Hz;
Operating Environment	10 to 40°C, up to 95% RH
Storage Environment	-20 to 70°C, up to 95% RH
Dimensions / Weight	390 x 350 x 380 mm (15.3 x 13.8 x 14.9"); approximately 10 kg (22 lbs.)

