

HI 901 • Automatic Titration System

**Automatic Burette Volume Recognition**

This feature makes exchanging titrants convenient, safe and fast.

**Quick Change**

Keep several burettes on hand for a quick change.

**Stirrer**

The optional stirrer ensures an effective mixing with a selectable speed from 100 to 2500 rpm.



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| A. Aspiration Tube (Titrant Inlet) | G. Sliding Positioning Collar | M. Numeric Keys |
| B. Dispensing Tube (Titrant Outlet) | H. Dispensing Tip | N. Function Keys |
| C. Burette Assembly | I. Temperature Sensor | O. Help Key |
| D. Light Shield (in closed state) | J. pH Electrode | P. Arrow Keys |
| E. Burette Support | K. Stirrer Propeller | Q. Option Keys |
| F. Support Bar | L. Stirrer Stand | R. 320 x 240 Pixel Graphic LCD |

A Complete Analysis

These instruments perform a complete analysis comprising of sample preparation, dispensing of titrant solution, stirring, measuring and waiting times, recognition of the end point and storing the results. All the parameters that a titration requires are grouped into a method.

The titrators are already supplied with a set of standard methods or you can create your own. Using a floppy disk or connecting the titrator to the HI 900 PC application, methods (standard and user) can be upgraded, stored or deleted.

Clip-Lock™ Exchangeable Burette System

With Clip-Lock™, it only takes a couple of seconds to exchange the reagent burettes to perform a different titration.

With conventional titrators, there is the risk of cross contamination of titrants when exchanging reagents. Reconfiguring the titrator for different sample methods consumes time and reagents. Each method may need different reagents and care must be used when purging and cleaning the burette. To avoid these problems, HANNA introduces the Clip-Lock™ exchangeable burette system to prevent cross



contamination while reducing loss of time and reagents. Burettes simply slide out for quick exchanges and detaching the aspiration and dispensing tubes from the titrant bottles is easy.

Having several prepared burettes on hand will make the HANNA 900 series the fastest and most versatile titration systems available. Interrupting an important cycle of analysis due to a malfunctioning burette is a thing of the past. With the HANNA Clip-Lock™ system you can simply substitute the burette and complete all your tests with the same titrant!

HANNA's burettes feature a threaded screw connection to prevent leakage problems. Burettes are available in 5 mL, 10 mL & 25 mL sizes and are made of chemically resistant material to ensure many years of trouble-free operation.

HI 901 Connectivity



PC with HANNA software



VGA Display



Parallel Printer



PC Keyboard

SPECIFICATIONS	mV	pH	Temperature
Range	-2000.0 to 2000.0 mV	-2.000 to 20.000 pH	-5.0 to 105.0°C/23 to 221°F/ 268.2 to 378.2 K
Resolution	0.1 mV	0.1/0.01/0.001 pH	0.1°C/0.1°F/0.1K
Accuracy (@25°C/77°F)	±0.1 mV	±0.001 pH	±0.1°C/±0.2°F/±0.1K (excluding probe error)
Burette Sizes	5, 10, and 25 mL		
Burette Resolution	1/40000		
Display Resolution	0.001 mL		
Dosing Accuracy	±0.1% of full burette volume		
Display	graphic LCD, 320 x 240 pixel LCD		
Languages	English, Italian, Portuguese, Spanish		
Methods	up to 10,000 methods (standard and user-defined)		
Burette Auto-Detection	burette size is automatically recognized when inserted into the unit		
Programmable Stirrer	propeller type, 100-2500 RPM, automatically held within 10% of the set value, resolution 100 rpm		
Flow Rate	user-selectable from 0.1 mL/min to 2 x burette volumes/min		
pH/mV Measurement	titrators can also perform direct pH and mV measurements		
Temperature Compensation	manual or automatic (ATC)		
pH Calibration	manual or automatic at one to five points with four buffer sets or custom buffers		
Potentiometric Titrations	acid-base (pH or mV-Mode), redox, precipitation, complexometric, non-aqueous, ion-selective, argentometric (in mV-mode only)		
HI 901 Titration Methods	fixed mV or pH end-point detection & first equivalency point detection (with the 1st or 2nd derivatives)		
Measurement Units	user specified expression of concentration units to suit specific calculation requirements		
Real Time & Stored Graphs	mV-volume or pH-volume titration curve, 1st derivative curve or 2nd derivative curve, in pH-mode or mV-mode; pH/mV values versus time-datalogging results		
Data Storage:	up to 100 complete titration and pH/mV logging complete reports		
Disk Drive:	built-in 3.5" floppy disk drive allows storage and transfer of configurations, preprogrammed methods, custom methods, titration reports and bitmap graph files		
Peripherals	connections for VGA display, PC-keyboard, parallel printer, RS 232 input, interface for future expansion		
GLP Conformity	instrumentation data storage and printing capabilities		
Operating Environment	10 to 40°C (50 to 104°F), up to 95% RH		
Storage Environment	-20 to 70°C (-4 to 158°F), up to 95% RH		
Power	110V/220 Vac; 50-60Hz		
Dimensions	390 x 350 x 380 mm (15.3 x 13.8 x 14.9 in)		
Weight	approx. 10 kg (22 lbs.) with one pump and stirrer assembly		

ORDERING INFORMATION

HI 901-01 (115V) and HI 901-02 (230V) is supplied with (1) 25 mL glass burette, (1) burette driver assembly, power adapter and instructions.