

HI84530

Total Titratable Acidity Titrator and pH Meter

for Water Analysis

- **Piston driven pump with dynamic dosing**
 - For highly accurate, repeatable results
- **Two endpoints and two ranges**
- **CAL Check™**
 - Alerts users to potential problems during calibration such as contaminated buffers or a dirty/broken pH electrode
- **Log-on-demand**
 - Log data up to 400 samples (200 for titration; 200 for pH/mV)
- **Graphic mode/exportable data**
 - Displays in-depth data on titration, which can then be stored and exported to either a USB drive or PC using the USB connection
- **Automatic stirrer speed control**
 - Maintains stirrer speed at approximately 600 rpm regardless of viscosity of solution
- **GLP features**
 - Date, time, offset, slope and buffers used
- **Easy-to-use interface**
 - User intuitive design with large keys and easy to navigate screens
- **HELP features**
 - Dedicated HELP key for content sensitive help
- **pH/mV meter**
 - Doubles as a benchtop pH meter



An Easy-to-Use, Fast and Affordable All-in-one Solution

The HI84530 is an easy to use, fast and affordable mini automatic titrator with a pH meter designed for the rapid and accurate analysis of Total Titratable and Strong Acidity in water. This new generation of mini automatic titrator improves upon the titrant delivery system and measuring ranges for increased accuracy compared to previous models. This meter reflects Hanna's years of experience as a manufacturer of analytical instruments.

The HI84530 incorporates a precise piston dosing system, which allows for a highly accurate determination of the amount of titrant used. It is also capable of dynamic dosing, making testing both faster and more

accurate. Pump calibrations are performed with the provided Hanna standard and help assure the accuracy of the measurement.

An intuitive interface makes the instrument simple to use and the dedicated HELP key guides the user through set-up, calibration status, and troubleshooting.

This mini titrator includes a pre-programmed analysis method based on the Standard Methods of Water and Wastewater Determination. It uses a powerful algorithm which analyzes the shape of the electrode response in order to determine when the titration reaction has reached completion.

This mini titrator is also designed to be used as a benchtop pH/mV meter. The CAL Check function not only ensures an accurate pH

reading when the HI84530 is used as a pH meter but also an accurate titration since the endpoint is determined by a set pH value.

Total Titratable Acidity

Water acidity is an important parameter to monitor as it can affect the corrosive capacity of a water, chemical reaction rates and biological processes. Acidity can also be used to monitor pollution in wastewater and drinking water.

Total titratable acidity is a measure of all of the acid compounds present in a sample. Many factors can contribute to the acidity of water in a sample, including strong acids (hydrochloric, sulfuric, nitric, etc.), weak acids (organic acids) and other acidic components (aluminum, iron, etc.).

On-screen Features



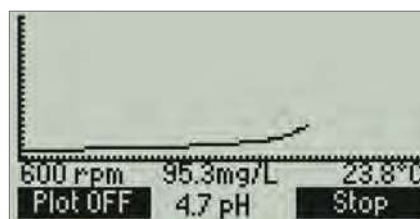
Easy and clear measurement

The HI84530 is a single parameter titrator designed to measure total acidity in a few easy steps. The HI84530 displays the results directly on the screen in user-selectable units.



pH meter with electrode condition on display

The HI84530 also functions as a pH meter. The HI84530 also displays the electrode condition on the LCD using Hanna's exclusive electrode diagnostics.



Titration curve displayed on screen

The HI84530 offers real time graphing of the titration curve on the LCD.

Specifications

HI84530

Titrator	Range (as CaCO ₃)	Low Range: 15.0 to 400.0 mg/L; 0.3 to 8.0 meq/L High Range: 300 to 4000 mg/L; 6.0 to 80.0 meq/L
	Resolution	Low Range: 0.1 mg/L / 0.1 meq/L High Range: 1 mg/L / 0.1 meq/L
	Accuracy (@25°C/77°F)	Low Range: ±0.5 mg/L or 3% of reading, whichever is greater High Range: ±15 mg/L or 3% of reading, whichever is greater
	Titration Method	acid-base titration, total acidity / strong acidity
	Titration Principle	fixed endpoint titration : 8.30 pH (phenolphthalein) or 3.7 pH (Methyl Orange)
	Pump Speed	10 mL/min
	Stirring Speed	600 rpm
pH Meter	Range	-2.0 to 16.0 pH / -2.00 to 16.00 pH
	Resolution	0.1 pH / 0.01 pH
	Accuracy (@25°C/77°F)	± 0.01 pH
	Calibration	one, two or three-point calibration; four available buffers (pH 4.01, 7.01, 8.30, 10.01)
	Temperature Compensation	manual or automatic from -20 to 120 °C (-4 to 248 °F)
mV Meter	Range	-2000.0 to 2000.0 mV
	Resolution	0.1 mV
	Accuracy (@25°C/77°F)	± 1.0 mV
Temperature	Range	-20.0 to 120.0°C; -4.0 to 248.0°F; 253.2 to 393.2 K
	Resolution	0.1°C; 0.1°F; 0.1 K
	Accuracy (@25°C/77°F)	±0.4°C; ±0.8°F; ±0.4 K
Additional Specifications	Logging	up to 400 samples (200 pH/mV, 200 titration)
	pH Electrode	HI1131B glass body pH electrode with BNC connector and 1 m (3.3') cable (included)
	Temperature Probe	HI7662-T stainless steel temperature probe with 1 m (3.3') cable (included)
	Connectivity	(1) Type-B USB for PC interface, (1) Type-A USB for storage
	Environment	0 to 50 °C (32 to 122 °F); max 95% RH non-condensing
	Power Supply	12 VDC power adapter
	Dimensions	235 x 200 x 150 mm (9.2 x 7.9 x 5.9")
	Weight	1.9 kg (67.0 oz.)
Ordering Information	HI84530-01 (115V) and HI84530-02 (230V) are supplied with HI1131B pH electrode, HI7662-T temperature probe, HI7082 electrode fill solution, HI84530-70 reagent kit for water analysis, 100 mL beakers (2), dosing pump valve, 5 mL syringe, 1 mL plastic pipette, tube set (aspiration tube with titrant bottle cap and dispensing tube with tip), stir bar, power adapter, instruction manual and quality certificate.	