

Total Titratable Acidity Titrator

Total Titratable Acidity Measurement

The HI 84430 is an automatic titrator designed for easy, fast and accurate analysis of Total Titratable Acidity in water. Potentiometric endpoint determination, peristaltic titrant delivery and integrated magnetic stirring systems eliminate the error and technique dependent results associated with manual titrations.

The accuracy of the instrument is ensured by performing a peristaltic pump calibration using the provided HANNA standard. The HI 84430 endpoint determination algorithm analyzes the pH vs. volume curve to determine the exact pH endpoint and performs the necessary calculations. The results are displayed in mg/L CaCO₃ or meq/L CaCO₃ units on the graphic display.

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

HI 84430 features include: log on demand for up to 100 samples (50 pH measurements, 50 titration results), GLP compliance and PC interface via USB.

ORDERING INFORMATION

HI 84430-01 (115V) and **HI 84430-02** (230V) are supplied with HI 1131B pH electrode, HI 7071 filling solution (30 mL), HI 7662-M temperature probe, HI 84430-50 titrant low range (100 mL), HI 84430-51 titrant high range (100 mL), HI 84430-55 pump calibration solution (230 mL), HI 84430 additional reagent (30 mL), HI 7061 cleaning solution, HI 7001M pH 1.68 buffer solution (230 mL), HI 7004M pH 4.01 buffer solution (230 mL), HI 70083M pH 8.30 buffer solution (230 mL), 100 mL beakers (2), tube set with dispensing tip, stir bars (medium 2 pcs.), 12 Vdc power adapter, instruction manual, and quick reference guide.



- User-friendly interface
- Dedicated HELP key
- Simple to operate
- Log on demand up to 100 samples (50 for pH measurement; 50 for titration results)
- GLP feature, to view last calibration data for pH electrode and pump
- PC interface via USB connection



SPECIFICATIONS

HI 84430

Range	Titratable Acidity (Low Range)	mg/L : 15.0 - 500.0 mg/L as CaCO ₃ meq/L : 0.3 - 10.0 meq/L
	Titratable Acidity (High Range)	mg/L : 400 - 4000 mg/L as CaCO ₃ meq/L : 8 - 80 meq/L
	pH	-2.0 to 16.0 pH / -2.00 to 16.00 pH
	Temperature	-20.0 to 120.0 °C (-4.0 to 248.0 °F)
Resolution	Titratable Acidity (Low Range)	0.1 mg/L; 0.1 meq/L
	Titratable Acidity (High Range)	1 mg/L; 1 meq/L
	pH	0.1 pH / 0.01 pH
	Temperature	0.1 °C
Accuracy	Titratable Acidity (Low Range)	5% of reading
	Titratable Acidity (High Range)	5% of reading
	pH	± 0.01 pH
	Temperature	±0.4 °C without probe error
Titration Method	Acid-base titration (total acidity)/(strong acidity)	
Titration Principle	End point titration : 8.30 pH / 3.7 pH	
Pump Volume	0.5 mL/min	
Stirring Speed	600 rpm	
pH Temperature Compensation	manual or automatic from: -20 to 120 °C (-4 to 248 °F)	
Logging	Titration	Up to 50 samples
	pH	Up to 50 samples
pH Calibration	1, 2 or 3 point calibration; 3 available buffers (1.68, 4.01; 8.30)	
pH Electrode	HI 1131B (included)	
Temperature Probe	HI 7662-M (included)	
Environment	0 to 50 °C (32 to 122 °F); max 95% RH non-condensing	
Power Supply	12 Vdc power adapter	
Dimensions/Weight	208 × 214 × 163 mm (8.2 × 8.4 × 6.4") (with beaker)/2200 g (77 oz.)	

ACCESSORIES

HI 84430-50	Titrant solution for low range (100 mL)	HI 70483M	Tube set with cap for titrant bottle and tip
HI 84430-51	Titrant solution for high range (100 mL)	HI 731319	Stir bar, 25 x 7 mm (10 pcs)
HI 84430-55	Pump calibration solution (500 mL)	HI 731342	Pipette for automatic dosage, 2000 µL
HI 84430-58	Additional reagent (30 mL)	HI 731352	Tip for 2000 µL graduated pipette (4pcs.)
HI 84430-70	Reagents kit for low and high range (about 150 titrations)	HI 731341	Pipette for automatic dosage, 1000 µL
HI 84430-71	Reagents kit for low range (about 150 titrations)	HI 731351	Tip for 1000 µL graduated pipette (25pcs.)
HI 84430-72	Reagents kit for high range (about 150 titrations)		