

HI97729 · HI97739

Fluoride, Low and High range Portable Photometers



- **Advanced LED optical system**
 - Innovative optical design that utilizes a reference detector and focusing lens to eliminate errors from changes in the light source and from imperfections in the glass cuvette.
 - LEDs have a much higher luminous efficiency, providing more light while using less power. They also produce little heat, which could otherwise affect electronic stability.
- **CAL Check™**
 - Validate instrument performance at any time using CAL Check cuvettes made with NIST traceable standards. The CAL Check screen guides the user step-by-step through the validation process and user calibration.
- **On-screen tutorial mode with animations**
 - Guides users step-by-step through the measurement process
- **Waterproof and floating IP67 case**
- **Unit of measure is displayed along with reading**
- **Built-in timer**
 - Built-in reaction timer that ensures consistency between tests.
- **Error messages on display**
 - Alerts to problems including no cap, high zero, and standard too low
- **GLP data**
 - Displays the last calibration date.
- **Auto logging**
- **Battery status indicator**
- **Auto-shut off**

Specifications		HI97729 Fluoride LR	HI97739 Fluoride HR
Measurement	Range	0.00 to 2.00 mg/L (ppm) (as F ⁻)	0.0 to 20.0 mg/L (ppm) (as F ⁻)
	Resolution	0.01 mg/L	0.1 mg/L
	Accuracy @25°C (77°F)	±0.03 mg/L ±3% of reading	±0.5 mg/L ±3% of reading
	Method	adaptation of the EPA method 340.1 and SPADNS method	adaptation of the SPADNS method
Measurement System	Light Source	light emitting diode	
	Bandpass filter	575 nm	575 nm
	Bandpass filter bandwidth	8 nm	
	Bandpass filter wavelength accuracy	±1.0 nm	
	Light Detector	silicon photocell	
	Cuvette type	round 24.6 mm diameter (22 mm inside)	
Additional Specifications	Auto logging	50 readings	
	Display	128 x 64 pixel B/W LCD with backlight	
	Auto-off	after 15 minutes of inactivity (30 minutes before a READ measurement)	
	Battery type / Life	alkaline 1.5 V AA (3) / > 800 measurements (without backlight)	
	Environment	0 to 50°C (32 to 122°F); 0 to 100% RH, non-serviceable	
	Dimensions	142.5 x 102.5 x 50.5 mm (5.6 x 4.0 x 2.0")	
	Weight	380 g (13.4 oz.)	

HI97729 and **HI97739** are supplied with sample cuvettes (2), sample caps (2), plastic stoppers (2), 1.5V AA batteries (3), instrument quality certificate, and instruction manual. CAL Check standards and testing reagents sold separately

Ordering Information

HI97729C and **HI97739C** includes photometer, CAL Check standards, sample cuvettes (2), sample caps (2), plastic stoppers (2), 2000 µL automatic pipette with instruction sheet, 1.5V AA batteries (3), cuvette wiping cloth, CAL Check standard certificate, instrument quality certificate, instruction manual, and rigid carrying case. Reagents sold separately

Reagents and Standards

HI97729	HI93703-53 reagent for reducing chlorine concentration
	HI97729-11 CAL Check standard cuvettes for fluoride LR
	HI93729-01 fluoride LR reagents for 100 tests
	HI93729-03 fluoride LR reagents for 300 tests
HI97739	HI97739-11 CAL Check standard cuvettes for fluoride HR
	HI93739-01 fluoride HR reagents for 100 tests
	HI93739-03 fluoride HR reagents for 300 tests

Significance of Use

Fluoride is best known for preventing tooth decay. Water authorities often add fluoride to drinking water to maintain approximately a 1.0 mg/L (ppm) concentration. Fluoride can be found naturally in groundwater, particularly if a reservoir is in close proximity to seawater. While fluoride does help prevent tooth decay, too little can be ineffective while too much can cause staining of teeth.