

HI97740 · HI97726

# Nickel, 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	HI97740 Nickel LR	HI97726 Nickel HR	
Measurement	Range	0.000 to 1.000 mg/L (ppm) (as Ni)	0.00 to 7.00 g/L (as Ni)
	Resolution	0.001 mg/L	0.01 g/L
	Accuracy @25°C (77°F)	±0.010 mg/L ±7% of reading	±0.07 mg/L ±4% of reading
	Method	adaptation of the 1-(2-pyridylazo)-2-naphthol PAN method	adaptation of the photometric method
Measurement System	Light Source	light emitting diode	
	Bandpass filter	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.)	

## Ordering Information

**HI97740** and **HI97726** 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

**HI97726C** includes photometer, CAL Check standards, sample cuvettes (2), sample caps (2), plastic stoppers (2), 1.5V AA batteries (3), scissors, cuvette wiping cloth, CAL Check standard certificate, instrument quality certificate, instruction manual, and rigid carrying case. Reagents sold separately

## Reagents and Standards

HI97740	<b>HI97740-11</b> CAL Check standard cuvettes for nickel LR
	<b>HI93740-01</b> nickel LR reagents for 50 tests
	<b>HI93740-03</b> nickel LR reagents for 150 tests
HI97726	<b>HI97726-11</b> CAL Check standard cuvettes for nickel HR
	<b>HI93726-01</b> nickel HR reagents for 100 tests
	<b>HI93726-03</b> nickel HR reagents for 300 tests

## Significance of Use

Nickel is commonly utilized by the electroplating industry in processes utilizing stainless steel, cobalt, or nickel alloys. By using nickel in certain alloys, manufacturers can achieve a product that is highly resistant to chemical stress and exhibits a longer lifespan. Nickel is also an essential trace element that is essential for biological processes in livestock health and production. Nickel is also used in batteries, fuel cells, and hydrogenation of vegetable oils in the food industry.