

Iron Low Range and High Range

Handheld Colorimeters

- Easier to use and more accurate than chemical test kits
- Dedicated to a single parameter
- Small size, big convenience
- Ideal for:
 - Industrial ground and treated waters
 - Mining leachate monitoring
 - Agricultural irrigation water
 - Pools and spas

About 6.3% of the earth's crust is made of iron, of which 43% is in soils. The analysis of iron is often performed to monitor ground water and irrigation waters as a gauge of corrosion from industrial settling, and as an indication of the effectiveness of treatment from mining leachate.

The Hanna HI746, HI721, and HI7214 Checker®HC bridge the gap between simple chemical test kits and professional instrumentation. Chemical test kits are not very accurate and only give 5 to 10 points of resolution, while professional instrumentation can cost hundreds of dollars and can be time-consuming to calibrate and maintain. These meters are accurate, affordable, and produce immediate results.

The HI721 and HI7214 features a resolution of 0.01 ppm and ± 0.04 ppm $\pm 2\%$ of reading accuracy while the HI746 features 1 ppb resolution and ± 20 ppb $\pm 5\%$ of reading accuracy.

The contoured style of these meters fit in your palm or pocket perfectly and the large LCD is easy to read. The auto shut-off feature assures battery life will not be drained if you forget to turn it off.



Pool
Line

Specifications	HI746 (LR)	HI721 (HR)	HI7214 (HR)
Range	0 to 999 ppb (as Fe)	0.00 to 5.00 ppm (as Fe)	0.00 to 5.00 ppm (as Fe)
Resolution	1 ppb	0.01 ppm	0.01 ppm
Accuracy	± 20 ppb $\pm 5\%$ of reading @ 25 °C (77 °F)	± 0.04 ppm $\pm 2\%$ of reading @ 25 °C (77 °F)	± 0.04 ppm $\pm 2\%$ of reading @ 25 °C (77 °F)
Light Source	Light Emitting Diode @ 575 nm	Light Emitting Diode @ 525 nm	Light Emitting Diode @ 525 nm
Light Detector	Silicon photocell		
Method	Adaptation of the TPTZ Method. The reaction between iron and the reagent causes a violet tint in the sample.	Adaptation of the Standard Methods for the Examination of Water and Wastewater, 23rd Edition, 3500-Fe B, Phenanthroline Method. The reaction between iron and reagent causes an orange tint in the sample.	
Environment	0 to 50 °C (32 to 122 °F); max. 95% RH non-condensing		
Battery Type	1.5V AAA Alkaline		
Auto-off	After 10 minutes of non-use	After 10 minutes of non-use and 2 minutes after reading	
Dimensions	86.0 x 61.0 x 37.5 mm (3.4 x 2.4 x 1.5")		
Weight	64 g (2.3 oz)		
HI746 Checker®HC is supplied with sample cuvette and cap (2 pcs.), Iron Low Range reagent starter kit (reagents for 25 tests), 25 mL glass cylinders with rubber cap (2 pcs.), 1.5V AAA Alkaline battery (1 pc.), and instruction manual.			
HI721 Checker®HC is supplied with sample cuvette and cap (2 pcs.), Iron High Range reagent starter kit (reagents for 6 tests), 1.5V AAA Alkaline battery (1 pc.), and instruction manual.			
HI7214 Checker®HC is supplied with sample cuvette and cap (2 pcs.), Iron High Range reagent starter kit (reagents for 6 tests), 1.5V AAA Alkaline battery (1 pc.), and instruction manual.			
Reagent Set	HI746-25 Reagents for 25 Iron Low Range tests	HI721-25 Reagents for 25 Iron High Range tests	HI7214-25 Reagents for 25 Iron High Range tests
Calibration Set	HI746-11 Iron Low Range certified standard kit	HI721-11 Iron High Range certified standard kit	HI7214-11 Iron High Range certified standard kit