

HI 93741

Total Hardness and Iron



Total Hardness and Iron Meter

HI 93741 can provide critical measurements of low range iron and total hardness (magnesium and calcium).

The iron concentration in water needs to be monitored since it can become harmful above certain levels. In domestic water, for instance, iron can alter the taste and make it unpleasant, stain laundry, damage kitchen wares and favor the growth of certain bacteria. Low levels of iron are also critical in beverage production.

Hardness, on the other hand, is indicative of presence of calcium and magnesium in water. By passing through various layers of soil and rocks, rain water dissolves some of the mineral substances.

Hardness is a consequence of the type of rock layers which the water passes through and of its permanence in the water bearing stratum.

Hardness can cause pipe rusting in water heating and cooling systems, reverse osmosis and demineralization plants. It can also increase the consumption of soaps and detergents in industrial washing machines or laundries.

With the portable HI 93741 you can keep a watchful eye over both iron and hardness levels.

Specifications

HI 93741 (Iron and Total Hardness)

Range	Iron	0 to 400 $\mu\text{g/L}$
	Total Hardness	0.00 to 4.70 mg/L
Resolution	Iron	1 $\mu\text{g/L}$
	Total Hardness	0.01 mg/L
Accuracy (@20°C/68°F)	Iron	$\pm 10 \mu\text{m/L} \pm 8\%$ of reading
	Total Hardness	$\pm 0.11 \text{ mg/L} \pm 5\%$ of reading
Light Source	LED (Light Emitting Diode) 555 nm	
Light Life	Life of the instrument	
Light Detector	Silicon Photocell	
Battery Type / Life	1 x 9V / approx. 40 hours of continuous use; Auto-off after 10 minutes of non-use	
Environment	0 to 50°C (32 to 122°F); RH max 95% non-condensing	
Dimensions	180 x 83 x 46 mm (7.1 x 3.3 x 1.8")	
Weight	290 g (10 oz.)	
Method	Iron	Adaptation of the TPTZ method
	Total Hardness	Adaptation of the Standard Methods for the Examination of Water and Wastewater, 18 th ed.)

Accessories

HI 710009	Shockproof rubber boot, blue	HI 93746-01	Reagent kit for 100 tests (Fe LR)
HI 710010	Shockproof rubber boot, orange	HI 93746-03	Reagent kit for 300 tests (Fe LR)
HI 731318	Tissue for wiping cuvetts (4 pcs)	HI 93719-01	Reagent kit for 100 tests (total hardness)
HI 93703-50	Cuvet cleaning solution (230 mL)	HI 93719-03	Reagent kit for 300 tests (total hardness)
HI 731321	Measuring cuvet (4 pcs)		
HI 731325	Cuvet cap (4 pcs)		

For a comprehensive list of accessories, see sections U and V

Ordering Information

HI 93741 is supplied complete with 3 cuvetts, battery and instructions.