

HI 96721

# Iron, High Range Photometer

Water Resistant and CAL CHECK™



## Iron, A Crucial Parameter to Monitor for Industrial Applications

Iron is naturally present in water in low concentrations, but it reaches high concentrations in wastewater effluents. Iron concentrations must be monitored as it is an indicator of corrosion in boilers and cooling towers.

The HI 96721 meter measures total iron (Fe) content in water samples in the 0.00 to 5.00 mg/L (ppm) range. The method is an adaptation of the USEPA Method 315B for natural and treated waters, and Standard Method 3500-Fe B for water and wastewater.

With the powerful CAL CHECK™ validation function, you are able to validate good performance of your instrument at any time. The validation procedure is extremely user friendly. Just use the exclusive HANNA ready-made, NIST traceable standards to verify the performance of the instrument and recalibrate if necessary.

The instrument is water resistant and the lamp and filter units are protected from dust or dirt by a transparent cup. This makes the instrument ideal for field applications. Display messages aid the user in routine operation. The meter has an auto-shut off feature that will turn off the instrument after 10 minutes of non use in measurement mode or after 1 hour if left in calibration mode.

The meter uses an exclusive positive-locking system to ensure that the cuvet is in the same position every time it is placed into the measurement cell. It is designed to fit a cuvet with a larger neck making it easier to add both sample and reagents. The cuvet is made from special optical glass to obtain best results.

The reagent contains both a reducing and a complexing agent: the first converts all but very most resistant forms of iron present in the sample to the ferrous (Fe<sup>2+</sup>) or soluble state; the second reacts with the ferrous iron to form the characteristic orange-colored complex.

The reagent is in powder form and is supplied in packets. The amount of reagent is precisely dosed to ensure the maximum repeatability.

### SPECIFICATIONS

### HI 96721

Range	0.00 to 5.00 mg/L
Resolution	0.01 mg/L
Precision	±0.01 mg/L to 1.50 mg/L
Light Source	Tungsten lamp
Light Detector	Silicon Photocell with narrow band interference filter @ 525 nm
Power Supply	(1) 9V battery
Auto-off	After 10 minutes of non-use in measurement mode; after 1 hour of non-use in calibration mode; with last reading reminder.
Environment	0 to 50°C (32 to 122°F); RH max 95% non-condensing
Dimensions	192 x 102 x 67 mm (7.6 x 4 x 2.6")
Weight	290 g (10 oz.)
Method	Adaptation of the USEPA method 315B and Standard Method 3500-Fe B.



## Available as a KIT

Just choose the "C" version

HI 96715C kit version shown.

### ORDERING INFORMATION

**HI 96721** is supplied with (2) sample cuvettes with caps, 9V battery and instruction manual.

**HI 96721C** is supplied with CAL CHECK™ standard cuvettes, (2) sample cuvettes with caps, 9V battery, cuvet cleaning cloth, scissors and instruction manual in a hard carrying case.

### REAGENTS AND STANDARDS

**HI 95721-11** CAL CHECK™ Standard Cuvettes (1 set)

**HI 93721-01** Reagent kit for 100 tests

**HI 93721-03** Reagent kit for 300 tests

### SOLUTIONS

**HI 93703-50** Cuvet cleaning solution, 250 mL

### ACCESSORIES

**HI 740029P** 9V Batteries (10)

**HI 721310** 9V Batteries (100)

**HI 731318** Cuvet cleaning cloth (4)

**HI 731331** Measuring cuvettes (4)

**HI 731335** Cuvet caps (4)



HI 731318 — Cuvet Cleaning Cloth