MetalGuard™ Iron

Dissolved, Organic and Total Iron Monitor

10 YEAR WARRANTY

MetalGuard™ Iron is the first fully automated, online iron analyzer that provides dependable real-time data on dissolved, organic and total iron levels to support the delivery of safe drinking water and monitor corrosion in water transport systems.

With reliable, continuous, high-frequency data on influent and effluent iron levels, MetalGuard™ Iron aids in the control and optimization of water treatment and iron contamination removal processes.

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MetalGuard™ Iron Features

- Accurate (±15%), reliable and continuous measurement of dissolved, organic and total iron
- Dissolved, organic and total iron can be analyzed separately
- Rapid results within 30 minutes (per specie)
- Self-calibrating, automated unattended operation with remote control capabilities
- Robust and stable design, regardless of sample matrix conditions
- Condition monitoring of analyzer performance is provided 24/7/365

Every MetalGuard™ Iron monitor is offered with an annual service contract inclusive of a 10-year warranty.

Simple Operation, Reliable Results

The MetalGuard™ Iron analyzer delivers rapid results with an equivalent accuracy compared to an accredited analytical laboratory. With MetalGuard™ Iron, frequent and economical testing can be completed through an automated and unattended process. The analyzer features self-calibration and is equipped with the SafeGuard™ Pro automated sample preparation and analyzer support system.

With SafeGuard™ Pro, sample preparation is completed in fewer than 60 minutes and provides the MetalGuard™ Iron analyzer with a sample suitable for iron speciation: dissolved, organic and total iron. Also, the versatile SafeGuard™ Pro module removes sample matrix interferences which ensures high iron probe stability and sensitivity.

Exterior/interior view of SafeGuard™ Pro automated sample preparation and analyzer support system.

MetalGuard™ Iron Specifications

PERFORMANCE

Measurement Range	0.02 - 100 ppm for dissolved, organic and total iron
Measurement Accuracy	20 ppb or ± 15%
Measurement Time	30 minutes typical (dissolved iron). 60 min total iron
Sample Stream Supported	Standard configuration: One With optional external manifold: Up to six
Sample Requirements	Temperature: 0 - 40°C Pressure: 5 - 45 psi pH range: 4 - 9
Sampling Scheme	Standard configuration: dead-end type, input line pumped out prior to each measurement, stagnant between measurements. Optional configuration: custom plumbing on external rack

SYSTEM

User Interface	Display: 4 line X 20 characters, sunlight readable. Dedicated function keys for: system initialization and test, automatic operation, manual maintenance, sampling and data acquisition setup
Annunciator Interface	2 alarm relays, plus 6 relays to control external solenoid valves
Electrical	100-130VAC, 50/60Hz (option for 200-260VAC 50/60Hz) 200W
Telemetry	Remote data access and system condition monitoring
Operating Conditions	Temperature (standard configuration): 5°C - 35°C Temperature (with optional weatherproof enclosure): -20°C - 50°C Humidity: <95%, non-condensing
Monitor Cabinet	NEMA 12 rated Houses all electronics and measurement fluidics User-friendly, front panel HMI
Reagent Cabinet	NEMA 12 rated Houses Standard Reagent Tray
Maintenance Schedule	Quarterly
Reagent Consumption	Standard Reagent Tray provides up to 3,000 measurements (Replenished monthly at continuous sampling of four sample streams)
Dimensions	H 60", W 32", D 13"

OPTIONS

External Rack	Houses sample manifold & sample pressure regulation and filtering Supplies waste drain connection and waste carboy Provides D.I. water generation
Weatherproof Enclosure	NEMA 4X system enclosure Environmentally controlled enclosure: with /air conditioner, heat
Sample Preparation	Pre-treatment module Filter system

WARRANTY

Service	Annual service contract inclusive of 10-year warranty.

*Note: AMS reserves the right to change the specifications as necessary.

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