



SAMPLE SENTRY® II

Automated Sample Conditioning Module

“Smart” Sampling Module for Single Line or Multiple Line Applications



Features

- The Sample Sentry® II is a fully automated sample conditioning system providing automatic startup (including blowdown), flow control, and shut down
- Improves sample accuracy
- Better chemistry control
- Longer analyzer cell life
- Self-cleaning
- Increases operator efficiency
- Automatic blowdown operation reduces crud build up and improves sample representativity
- Meets sampling guidelines recommended by EPRI (Report #CS-5164, ASME PTC 19.11, ASTM D5540, VGB Guidelines)

Description

Automated flow control is the only way to get constant sample flow regardless of source pressure. EPRI-sponsored research and plant chemistry experts agree on the need for sampling at a constant velocity of 5 – 6 feet/second (1.5 – 1.8 m/sec) for water samples with varying source pressures. This guideline is quickly becoming a preferred operating method.

Sentry Equipment's patented automated sample conditioning module for remote or centralized sampling has been designed to meet today's requirements for representative sampling by maintaining a constant flow rate despite varying conditions. The module utilizes industry-proven Sentry Equipment conditioning components.

Digital control and display with alarm and shutoff capability

- improves operator safety
- protects analyzer against over-temperature and pressure conditions

“Smart” sample modules with network communications for remote computer display and control

- make remote sampling possible
- allow for unattended sampling
- simplify data acquisition or interface with DCS

SPECIFICATIONS



Sample Sentry[®] II is designed to meet requirements for representative sampling by maintaining a constant flow rate with varying inlet conditions.

Models:

Low Pressure Model (SL202L)

100–500 psi (6.9–35 bar) @ 450°F (232°C)

High Pressure Model (SL202H)

500–3000 psi (35–207 bar) @ 1000°F (540°C)*

* Higher pressure model available

Flow Control:

Range 0–3400 cc/min

Accuracy ± 5% of full scale

Measurements:

Final Sample Temperature

Cooling Water Outlet Temperature

Inlet Sample Pressure

Sample Flow Rate

Temperature Measurements:

Range 32°–250°F (0°–121°C)

Accuracy ± 1°F (±0.56°C)

Communications:

Protocol MODBUS[®] RTU

Network RS-485

Common Alarm Relay Contact available

Display:

Graphical Vacuum Fluorescent Display

Power:

100–240 volt, 1-phase, 50/60 Hz input power

Instrument Air Requirements:

Minimum Pressure 80 psi (5.5 bar)

Maximum Pressure 120 psi (8.3 bar)

Air Consumption <0.2 scfm (<0.34 scmh)

Dimensions:

14 in. x 42.5 in. (356 mm x 1080 mm)

Mounting Configuration:

Surface, pipe or rack

Ambient Temperature:

32°–122°F (0°–50°C)

RH 95% ma. non-condensing at 104°F (40°C)

Approximate Shipping Weight:

65 lb (29 kg)

Specifications are subject to change without notice.

Options:

- High pressure blowdown valve (shipped loose)
- Secondary TR series sample cooler (includes additional temperature sensor)
- High cooler capacity of 3.5 ft² (.33 m) for primary and/or secondary cooling
- Stainless steel cooling water valves

WARNING

It is solely the responsibility of the end-user, through its own analysis and testing, to select products and materials suitable for their specific application requirements, ensure they are properly installed, safely applied, properly maintained, and limit their use to their intended purpose. Improper selection, installation, or use may result in personal injury or property damage.



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QUALITY MANAGEMENT SYSTEM
CERTIFIED BY DNV
ISO 9001:2008

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