Sierra Announces NEW Line of MEMS-Based Thermal Mass Flow Controllers & Flow Meters

Optimized for Biopharm OEMs & Rotameter Replacement with Lifetime No-Drift Sensor Warranty

January 15, 2020 – Monterey – Sierra Instruments, global leader in mass flow, announces the launch of their RedySmart™ mass flow meters and controllers ideal for BioPharm OEMs. Sierra also announces RedyCompact™ flow meters and regulators as an ideal upgrade to antiquated rotameters. These thermal instruments employ high-precision MEMS (Micro-Electro Mechanical Systems) technology utilizing an advanced, ultra-stable no-drift CMOS (Complementary Metal Oxide Semiconductor) sensor. Because of the inherent stability of the thermal sensor design, Sierra offers a unique “Lifetime No-Drift Warranty” on the sensor. This offers a huge advantage in OEM applications where long-term stability is key.

The MEMS-based thermal mass flow meters and controllers complements Sierra’s current capillary-based thermal SmartTrak® scientific product line by offering users a true OEM mass flow control solution with its modular design, cabling system, easy integration into a gas mixing block, and features digital communications options with Modbus included at no additional charge.

“There is no better way to kick off a new year than with a brilliant new OEM mass flow controller solution for our customers. Sierra is the only company in the industry to offer a Lifetime No-Drift sensor warranty, so OEMs get the stability needed for original products that require no downtime,” says Matt Olin, President of Sierra Instruments.

RedySmart flow meters and controllers contain no moving parts and are unaffected by upstream temperature and pressure fluctuations. They also provide a compact footprint, easy integration onto a cost-effective gas mixing block, and a wide array of communications protocols.

**RedySmart- Key Differentiators for OEMs**

- Lifetime no-drift sensor warranty - If drift occurs, instrument will be repaired or replaced free-of-charge.
- Modular-Customize to Needs. An easy-connect communication and power cable system has been designed for ultimate flexibility.
- Precision Valve - A precision electromagnetic control valve allows the valve seat to assume the exact height above the valve orifice necessary to maintain flow to the set point.

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• Fast Set Point Control- Response times as fast as +/-80ms
• Advanced Calibration, NIST-Traceable. Each unit is calibrated over its entire flow range using real gas to assure accuracy and repeatability over the life of a device.
• Communications- Human & System Interface. An available local display readout communicates key flow data while each device can be configured in the field with a free software app.
• Limited flow range up to 500 slpm

The RedyCompact offers users a valuable digital upgrade to mechanical rotameters. Battery powered, with a large touch-screen, RedyCompact is easy to read from a distance with its automatic screen adjustment (0°/90°/180°/270°) for easy installation and visibility. RedyCompact also offers higher mass flow accuracy than volumetric rotameters and regulates flow rate with the high-resolution value by dialing in your manual setpoint. Set alarms so the meter tells you when a flow event occurs. Easily configure from the touch screen. Two standard AA batteries gives the meter months of operation. An optional Micro-USB power plug is also available.

“And our RedyCompact meter is going to be a real eye-opener for thousands of industries that have recognized the limitations of their rotameters,” adds Olin. As volumetric meters, rotameters are unable to measure gas mass flow rate. The result is poor accuracy. As a drop-in replacement, it’s the ultimate alternative to common sight-glass rotameters meters.”

RedyCompact - Key Differentiators
• Lifetime no-drift sensor warranty - If drift occurs, instrument will be replaced free-of-charge.
• Mass flow not volumetric for improved accuracy
• Flow Control – Precision Needle Valve. Dial in precise mass flow control with the needle valve
• Compact Design -Small footprint to accommodate drop-in replacement for any rotameter in the market
• Large Touch-Screen Display- offers intuitive navigation and automatic screen adjustment (0°/90°/180°/270°) for easy installation and visibility
• Flow Alarms- Get notified. Set alarms so the meter tells you when a flow event happens.
• Advanced Calibration – Like the RedySmart, each unit is calibrated over flow range to assure accuracy and repeatability over the life of the device.

The RedySmart and RedyCompact models are calibrated over their entire flow range to assure accuracy and repeatability over the life of the device. A fully automated system capable of calibrating hundreds of units at once eliminates any human error during the calibration process.

Five versions of the RedySmart and four versions of the RedyCompact are available through your Sierra Representative or at Sierra’s online store. [https://www.sierrainstruments.com](https://www.sierrainstruments.com).

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About Sierra

We understand flow is tough. We can solve this together.

A global leader in flow measurement and control for over 45 years, Sierra Instruments designs and manufactures fluid flow measurement and control solutions for customers spanning global industries as diverse as scientific research, oil & gas, energy management, semiconductor, clean energy, aerospace and biotech to name a few. Sierra provides state-of-the-art calibration and fast localized service. With over 150 locations in over 50 countries, Sierra is uniquely positioned to provide innovative products and lifetime support for the leading companies of today and the growth enterprises of tomorrow. Sierra is a proud member of the TASI Group.