



# MONITOR COMPRESSED AIR LINES AND SAVE ENERGY

## COMPRESSED AIR FLOW MONITORING

Compressed air generally uses more electricity than any other type of equipment. Sage Insertion Style Thermal Mass Flow Meters can help identify leaks in a compressor system, track overall usage to improve plant efficiency, and help departments reduce consumption. Thousands of dollars can be saved. For example, if a compressor system running at 100 psi had total leaks of 1/4", it would pass 100 CFM of unused compressed air. Based on 24 hours and 12 cents a KW/H, the annual wasted power would exceed \$20,000! Sage Insertion Meters measure direct mass flow and have the sensitivity to detect even a few SCFM out of a thousand SCFM, so detecting leaks is an easy matter. The portability and ease of installation, allows many check points with a single \$2500 meter – simply insert the probe into the installed compression fittings to the recommended insertion depth. The mass flow rate, total, and temperature are reported on the display (the flow and temperature are also reported by 4-20 ma outputs) and the highest reading, lowest reading (with date and time stamps) and average reading (for past hour) are continuously tracked. For additional information, contact your local factory trained Sage representative (see [www.sagemetering.com](http://www.sagemetering.com) and click on the Reps Link to locate your nearest rep), or contact Sage Metering at 866-677-7243 to assist you with your application.

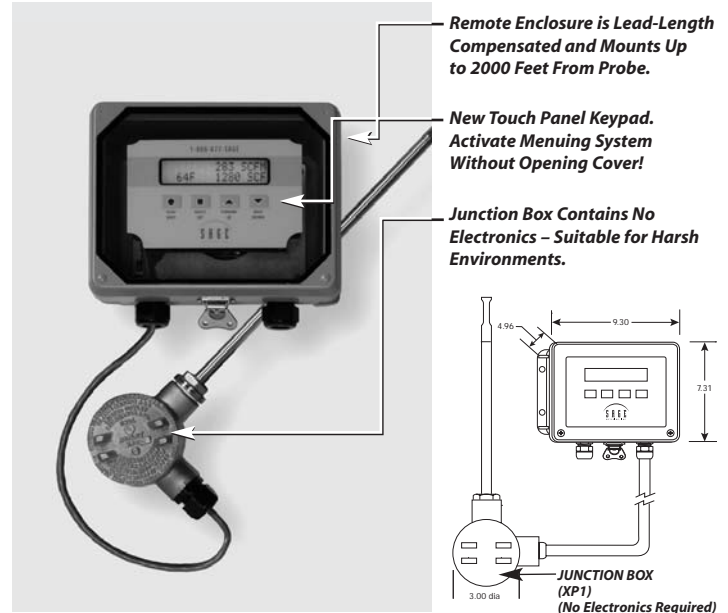
## THERMAL MASS FLOW METERS

Sage Metering is your source for monitoring, measuring and controlling the gas mass flow in your industrial process. Our high performance, NIST traceable, thermal mass flow meters will help increase productivity, reduce energy costs, and maximize product yields. With over 70 years of combined experience in delivering quality in-line and insertion thermal mass flow meters for a wide variety of industrial needs, the Sage Metering management team is dedicated to providing you with the performance and customer support that you deserve.

Sage Thermal Mass Flow Meters are designed for high performance mass flow measurement of flow rate and consumption of gases. They are field rangeable and have a convenient user interface.

Sage Metering has distinguished itself by offering a higher standard – our mass flow meter output is virtually independent of even large process temperature variations, and our digital electronics is impervious to external analog noise. In addition, our meters feature a back-lit display that reports mass flow or velocity, totalized mass flow, and temperature. Isolated 4-20 ma outputs for mass flow and/or temperature, relays, and a convenient RS232 and keypad user-interface, gives you the flexibility to integrate the functions of flow measurement with your specific needs.

See Sage Metering product brochure for additional information and product benefits.



## HOW DOES THERMAL MASS FLOW MEASUREMENT BENEFIT YOU?

- Direct Mass Flow – No need for separate temperature or pressure transmitters
- High Accuracy and Repeatability – Precision measurement and optimal control of your process
- Rangeable over 100:1 Turndown (1000:1 with multiple calibrations) – Accommodates the extremes of your process with one instrument
- Low-End Sensitivity – Detects leaks, and measures flow, even on start-up
- Negligible Pressure Drop – Will not impede the flow nor waste energy
- No Moving Parts – Eliminates costly bearing replacements, and prevents undetected accuracy shifts
- Dirt Insensitive – Provides sustained performance

## WHAT ARE THE BENEFITS THAT SAGE THERMAL MASS FLOW METERS OFFER YOU?

- **New:** Verify sensor cleanliness and validate calibration with self-check routine
- **New:** Touch Screen Technology. The cover does not need to be removed to access Menuing System
- **New:** Lead-Length Compensation. Remote electronics up to 2000 ft from probe
- **New:** Probe Junction Box requires no electronics. Suitable for harsh environments
- Available with up to four totally independent calibrations (four different gases, sensitivities, or configurations). Channels A–D selectable by keypad, laptop or external switch closure
- Powerful state-of-the-art microprocessor technology designed for high performance mass flow measurement, and field rangeability
- Proprietary sensor drive circuit provides enhanced signal stability and is unaffected by process temperature changes
- Menu driven user configurability, including full scale setting, units of measure, pipe area, channel selection, pulsed outputs of total, and diagnostics
- Easy to read 2-line back-lit flow rate/totalizer and temperature display. Also serves as dialog window for menu selection of user options
- RS232 PC interface and free Sage VIP software – easy to use
- Ease of installation, and convenient mounting hardware
- Flow conditioning built in to large flow meters (3/4" and up)