



SAGE GAS MASS FLOW METERS FOR INDUSTRY



Sage Thermal Mass Gas Flow Meters

| Industrial | | Heavy Industrial | | General Purpose | | General Purpose Blind | |
|------------|-----|------------------|-----|-----------------|-----|-----------------------|-----|
| SIP | SRP | SIE | SRE | SIG | SRG | SIL | SRL |

All products have rangeability as high as 1000 to 1, have extreme sensitivity (can measure as low as 10 SFPM or less), and are virtually unaffected by process temperature or pressure variations. The flow meters are dirt insensitive, have negligible pressure drop, and have no moving parts, assuring long term stability and sustained performance

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| Integral Windowed Enclosure - Dual Compartment with separate terminal access | Remote Windowed Enclosure - Dual compartment with separate terminal access, and Explosion Proof Junction Box | Heavy Industrial Windowed Explosion Proof Dual Compartment | Remote Heavy Industrial Windowed Explosion Proof -Dual Compartment, and Explosion Proof Junction Box | Windowed Nema 4X Enclosure | Remote Windowed Nema 4X Enclosure with Explosion Proof Junction Box | Blind Nema 4X Enclosure | Blind Remote Nema 4X Enclosure with Explosion Proof Junction Box |
| Integral | Remote enclosure is Lead-Length compensated up to 1000 feet (25 feet supplied) | Integral | Remote enclosure is Lead-Length compensated up to 1000 feet (25 feet supplied) | Integral | Remote enclosure is Lead-Length compensated up to 1000 feet (25 feet supplied) | Integral | Remote enclosure is Lead-Length compensated up to 1000 feet (25 feet supplied) |
| 24 VDC (12 VDC optional) with current dissipation of less than 100 ma, or 115VAC/230 VAC | 24 VDC (12 VDC optional) with current dissipation of less than 100 ma, or 115VAC/230 VAC | 24 VDC with current dissipation of less than 250 ma, or 115VAC/230 VAC | 24 VDC with current dissipation of less than 250 ma, or 115VAC/230 VAC | 24 VDC with current dissipation of less than 350 ma with backlight on (less than 250 ma with backlight off), or 115VAC/230 VAC | 24 VDC with current dissipation of less than 350 ma with backlight on (less than 250 ma with backlight off), or 115VAC/230 VAC | 24 VDC with current dissipation of less than 250 ma, or 115VAC/230 VAC | 24 VDC with current dissipation of less than 250 ma, or 115VAC/230 VAC |
| Very High Contrast Photo-emissive OLED Display | Very High Contrast Photo-emissive OLED Display | 2-Line Backlit LCD Display and 4 Button Menuing Keypad | 2-Line Backlit LCD Display and 4 Button Menuing Keypad | 2-Line Backlit Touch Screen Display and 4 Button Menuing Keypad | 2-Line Backlit Touch Screen Display and 4 Button Menuing Keypad | No Display | No Display |
| Displays numerical and graphical Flowrate, Totalized Flow and Temperature as well as Calibration milliwatts (mw) for ongoing diagnostics | Displays numerical and graphical Flowrate, Totalized Flow and Temperature as well as Calibration milliwatts (mw) for ongoing diagnostics | Displays Flowrate, Totalized Flow and Temperature | Displays Flowrate, Totalized Flow and Temperature | Displays Flowrate, Totalized Flow and Temperature | Displays Flowrate, Totalized Flow and Temperature | No Display | No Display |

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| 4-20 ma (ground based) output of Flow Rate and Pulsed Outputs of Totalized Flow (24 VDC Solid State Transistor Drive) | 4-20 ma (ground based) output of Flow Rate and Pulsed Outputs of Totalized Flow (24 VDC Solid State Transistor Drive) | 4-20 ma isolated output of Flow Rate. (optionally configurable for Temperature) | 4-20 ma isolated output of Flow Rate. (optionally configurable for Temperature) | 4-20 ma isolated output of Flow Rate, and 4-20 ma Flow Rate of Temperature | 4-20 ma isolated output of Flow Rate, and 4-20 ma Flow Rate of Temperature | 4-20 ma isolated output of Flow Rate, and 0 - 5 VDC output of Temperature | 4-20 ma isolated output of Flow Rate, and 0 - 5 VDC output of Temperature |
| SIP | SRP | SIE | SRE | SIG | SRG | SIL | SRL |
| Pulsed Outputs of Totalized Flow (24 VDC Solid State Transistor Drive) | Pulsed Outputs of Totalized Flow (24 VDC Solid State Transistor Drive) | One dry contact Relay suitable for Pulsed Outputs of Totalized Flow or configurable to Trip High or Trip Low | One dry contact Relay suitable for Pulsed Outputs of Totalized Flow or configurable to Trip High or Trip Low | Two dry contact Relays suitable for Pulsed Outputs of Totalized Flow or configurable to Trip High or Trip Low | Two dry contact Relays suitable for Pulsed Outputs of Totalized Flow or configurable to Trip High or Trip Low | Configurable for Pulsed Outputs of Totalized Flow (in lieu of Flow Rate and Temperature) | Configurable for Pulsed Outputs of Totalized Flow (in lieu of Flow Rate and Temperature) |
| Modbus Compliant RS485 RTU communications | Modbus Compliant RS485 RTU communications | RS232 Communication and Menuing Software (Sage VIP) | RS232 Communication and Menuing Software (Sage VIP) | RS232 Communication and Menuing Software (Sage VIP) | RS232 Communication and Menuing Software (Sage VIP) | RS232 Communication and Software (upon request) | RS232 Communication and Software (upon request) |
| Single Channel Operation | Single Channel Operation | Optionally available with up to four totally independent calibrations (Channels A through D). Meter can be calibrated with four different gases, four different configurations, or even four different sensitivities, or any combination of the above. | Optionally available with up to four totally independent calibrations (Channels A through D). Meter can be calibrated with four different gases, four different configurations, or even four different sensitivities, or any combination of the above. | Optionally available with up to four totally independent calibrations (Channels A through D). Meter can be calibrated with four different gases, four different configurations, or even four different sensitivities, or any combination of the above. | Optionally available with up to four totally independent calibrations (Channels A through D). Meter can be calibrated with four different gases, four different configurations, or even four different sensitivities, or any combination of the above. | Single Channel Operation | Single Channel Operation |
| Accuracy of +/- 1% of Reading +/- 0.5% of Full Scale | Accuracy of +/- 1% of Reading +/- 0.5% of Full Scale | Accuracy of +/- 1% of Reading +/- 0.5% of Full Scale per Channel | Accuracy of +/- 1% of Reading +/- 0.5% of Full Scale per Channel | Accuracy of +/- 1% of Reading +/- 0.5% of Full Scale per Channel | Accuracy of +/- 1% of Reading +/- 0.5% of Full Scale per Channel | Accuracy of +/- 1% of Reading +/- 0.5% of Full Scale | Accuracy of +/- 1% of Reading +/- 0.5% of Full Scale |
| Zero Calibration Self Check Diagnostics | Zero Calibration Self Check Diagnostics | Zero Calibration Self Check Diagnostics | Zero Calibration Self Check Diagnostics | Zero Calibration Self Check Diagnostics | Zero Calibration Self Check Diagnostics | Optional Diagnostics | Optional Diagnostics |
| Common Units of Flow Measurement: SCFM, SCFH, SCCM, NCMH, NCMH, KG/S, KG/M, KG/H, LBS/S, LBS/M, LBS/H, SLPM, SLPH | Common Units of Flow Measurement: SCFM, SCFH, SCCM, NCMH, NCMH, KG/S, KG/M, KG/H, LBS/S, LBS/M, LBS/H, SLPM, SLPH | Common Units of Flow Measurement: SCFM, SCFH, SCFD, SCCM, NCMH, NCMH, KG/S, KG/M, KG/H, KG/D, LBS/S, LBS/M, LBS/H, LBS/D, SLPM, SLPH | Common Units of Flow Measurement: SCFM, SCFH, SCFD, SCCM, NCMH, NCMH, KG/S, KG/M, KG/H, KG/D, LBS/S, LBS/M, LBS/H, LBS/D, SLPM, SLPH | Common Units of Flow Measurement: SCFM, SCFH, SCFD, SCCM, NCMH, NCMH, KG/S, KG/M, KG/H, KG/D, LBS/S, LBS/M, LBS/H, LBS/D, SLPM, SLPH | Common Units of Flow Measurement: SCFM, SCFH, SCFD, SCCM, NCMH, NCMH, KG/S, KG/M, KG/H, KG/D, LBS/S, LBS/M, LBS/H, LBS/D, SLPM, SLPH | Common Units of Flow Outputs (Not Displayed): SCFM, SCFH, SCFD, SCCM, NCMH, NCMH, KG/S, KG/M, KG/H, KG/D, LBS/S, LBS/M, LBS/H, LBS/D, SLPM, SLPH | Common Units of Flow Outputs (Not Displayed): SCFM, SCFH, SCFD, SCCM, NCMH, NCMH, KG/S, KG/M, KG/H, KG/D, LBS/S, LBS/M, LBS/H, LBS/D, SLPM, SLPH |
| Common Units of Totalized Flow: SCF, SCF, SCC, NCM, KG, LBS, SL | Common Units of Totalized Flow: SCF, SCF, SCC, NCM, KG, LBS, SL | Common Units of Totalized Flow: SCF, SCF, SCC, NCM, KG, LBS, SL | Common Units of Totalized Flow: SCF, SCF, SCC, NCM, KG, LBS, SL | Common Units of Totalized Flow: SCF, SCF, SCC, NCM, KG, LBS, SL | Common Units of Totalized Flow: SCF, SCF, SCC, NCM, KG, LBS, SL | Common Pulsed Outputs of Totalized Flow: SCF, SCF, SCC, NCM, KG, LBS, SL | Common Pulsed Outputs of Totalized Flow: SCF, SCF, SCC, NCM, KG, LBS, SL |

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| Common Units of Velocity: SFPM, SFPS, NMPM, NMPS, NMPH | Common Units of Velocity: SFPM, SFPS, NMPM, NMPS, NMPH | Common Units of Velocity: SFPM, SFPS, NMPM, NMPS, NMPH | Common Units of Velocity: SFPM, SFPS, NMPM, NMPS, NMPH | Common Units of Velocity: SFPM, SFPS, NMPM, NMPS, NMPH | Common Units of Velocity: SFPM, SFPS, NMPM, NMPS, NMPH | Common Units of Velocity Outputs (Not Displayed): SFPM, SFPS, NMPM, NMPS, NMPH | Common Units of Velocity Outputs (Not Displayed): SFPM, SFPS, NMPM, NMPS, NMPH |
| Temperature Units: °C and °F | Temperature Units: °C and °F | Temperature Units: °C and °F | Temperature Units: °C and °F | Temperature Units: °C and °F | Temperature Units: °C and °F | Temperature Outputs (Not Displayed): °C and °F | Temperature Outputs (Not Displayed): °C and °F |
| NA | NA | Insertion: CSA approved for Class I, Div 1, Groups B, C, & D. (Tested & approved to CSA C22.2 No 30 & CSA C22.2 No. 142) Meters have a T3C Rating. AC Powered meters, have a T2 Rating | Insertion: CSA approved for Class I, Div 1, Groups B, C, & D. (Tested & approved to CSA C22.2 No 30 & CSA C22.2 No. 142) Meters have a T3C Rating. AC Powered meters, have a T2 Rating | NA | Insertion: CSA approved for Class I, Div 1, Groups B, C, & D. (Tested & approved to CSA C22.2 No 30 & CSA C22.2 No. 142) Meters have a T3C Rating. AC Powered meters, have a T2 Rating | NA | NA |