

SIERRA[®] INSTRUMENTS

THE MASS FLOW COMPANY



Full Line Product Offering

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North America:
Monterey, California
Phone: 831-373-0200
Fax: 831-373-4402

Europe:
The Netherlands
Phone: +31 72 5071400
Fax: +31 72 5071401

Asia-Pacific:
Shanghai, P.R. China
Phone: +8621 5879 8521/22
Fax: +8621 5879 8586

www.sierrainstruments.com





Innova-Sonic®
Model 206 In-line

DESCRIPTION	ACCURACY	MEASURED FLUID	FEATURES
In-line digital correlation transit-time ultrasonic flow meter featuring PicoFly® Technology. Designed to give customers an alternative choice for typical liquid mag-meter applications; Featuring +/-0.5% of reading accuracy and the ability to measure down to zero flow in virtually any clean liquid regardless of conductivity	Accuracy: +/-0.5% of reading Repeatability: +/-0.07% of reading	Most liquids, Temp. -40°F to 176°F (-40°C to 80°C); bi-directional flow 0 to 22 fps (0 to 7 mps)	Powder-coated carbon steel (150# ANSI or DN PN10) flanges; NEMA 4X/IP 65 die-cast PC/ABS enclosure with IP 68 transducers; Assessed by the American Bureau of Shipbuilding for ship-board use
	OUTPUT SIGNALS 0/4 to 20 mA Relay Pulse output		



Innova-Sonic®
Model 210 Portable

DESCRIPTION	ACCURACY	MEASURED FLUID	FEATURES
Fully portable universal transit-time ultrasonic flow meter with digital signal processing. Bluetooth® wireless (Palm®) PDA; Clamp-on transducers with adjustable mounting racks; Pipes 1" to 200" (25cm to 5 meters); SD card with data collection program	Accuracy: +/-0.5% of reading Repeatability: +/-0.2% of reading	Most liquids, Temp. -40°F to 140°F (-40°C to 60°C) Bi-directional flow 0 to 40 fps (0 to 12 mps)	Daily, monthly and yearly totalized flow; Hygienic measurement; includes everything for field measurement in a convenient carrying case
	OUTPUT SIGNALS 4 to 20 mA; Bluetooth® wireless PDA		



GAS MASS FLOW METERS & CONTROLLERS



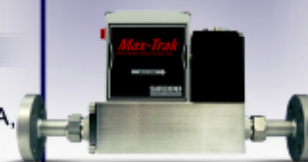
Smart-Trak® 2 Model 100

DESCRIPTION	ACCURACY & REPEATABILITY	MEASURED FLUID	FEATURES
Our highest performance gas mass flow meters and controllers; multi-gas capability; 316 stainless-steel construction; digital and analog communication. Field adjustment of calibration	Accuracy: +/-1.0% of full scale Repeatability: +/-0.2% of full scale	All clean gases including toxics, corrosives and reactives; maximum pressure to 500 psig (34 barg)	Patented Dial-A-Gas® for 10 different gases; Pilot module display & interface; powerful control valve; add Compod™ for Modbus networking
	FLOW RANGES * 101 Micro-Trak™: From 0.1 to 4 sccm full scale 100L: 0-10 sccm to 0-50 slpm 100M: 0-20 to 0-300 slpm 100H: 100 to 0-1000 slpm		



Max-Trak® Model 180

DESCRIPTION	ACCURACY & REPEATABILITY	MEASURED FLUID	FEATURES
NEMA 6 / IP67 Compliant Industrial Mass Flow Meters and Controllers for industrial mass flow control installations; multi-gas capability; 316 stainless-steel construction; includes both analog and digital communication	Accuracy: +/-1.0% of full scale Repeatability: +/-0.2% of full scale	All clean gases including toxics, corrosives and reactives; maximum pressure to 500 psig (34 barg)	All the features of the Smart-Trak® Model 100 in a rugged industrial package; Available in a heavy industrial flanged version
	FLOW RANGES * 180M: 0-10 to 0-300 slpm 180H: 0-100 to 0-1000 slpm		



INDUSTRIAL FLOW METERS

FOR GASES, LIQUIDS AND STEAM

- THERMAL
- TRANSIT-TIME ULTRASONIC
- MULTIVARIABLE VORTEX



Fast-Trak™ Model 730
Fast-Flo™ Model 620S
Boiler-Trak™

DESCRIPTION	ACCURACY & REPEATABILITY	MEASURED FLUID	FEATURES
Low cost, high performance insertion and in-line thermal mass flow meters for light industrial applications. Probe lengths 3.7" to 24" (9.5 to 61cm); In-line sizes 1/4" to 1 1/4" female NPT; Model 730 flow range from 10 sccm to 50 scfm (1400 slpm); NEMA 2X (Model 730) & NEMA 4X (Model 620S & Boiler-Trak™) enclosures	Accuracy: +/-1.0% of full scale Repeatability: +/-0.2% of full scale	Any inert gas; Boiler-Trak™ for natural gas & propane; maximum pressure to 150 psig (10 barg); temperature to 176°F (80°C)	Available in a multitude of configurations for OEM's; Boiler-Trak™ is optimized for natural gas and propane metering for furnaces, burners and boilers
	OUTPUT SIGNALS 0 to 5 VDC 0 to 10 VDC 4 to 20 mA Pulse totalizer output and RS485/MODBUS (620S & Boiler-Trak™)		



Steel-Mass™ Model 640S
Flat-Trak™ Model 780S
UHP (Ultra High Purity)

DESCRIPTION	ACCURACY & REPEATABILITY	MEASURED FLUID	FEATURES
Insertion and in-line thermal mass flow meters for heavy industrial & high purity applications. NEMA 4X and hazardous area enclosures; Approvals: FM, CSA, PED, CRN, CE, GOST, ATEX; smart electronics; probe lengths 6" to 36" (15.9 to 91.4cm); In-line flow body sizes from 1/4" to 8" (NPT or ANSI); DN 25 to DN 200	Accuracy: +/-1.0% of reading plus 0.5% of full scale Repeatability: +/-0.2% of full scale	Any gas or gas mixture; maximum pressure to 500 psig (34 barg); temperature to 350°F (176°C); optional high temperature to 750° F (400°C)	Dry-Sensor™ Technology; field validation, dual plate in-line flow conditioning; hot tap option; UHP (5 to 10 Ra); Multipoint options (both standard and high temp); purge option; flow conditioning baskets and flow switches available
	OUTPUT SIGNALS 0 to 5 VDC 4 to 20 mA Pulse totalizer output MODBUS (optional) FF, Profibus PA, HART (optional)		



Innova-Mass®
Models 240 & 241

DESCRIPTION	ACCURACY & REPEATABILITY	MEASURED FLUID	FEATURES
Fully integrated pressure, temperature and mass flow meter. Measures five process variables with ONE process connection; FM, CSA, CRN, ATEX and CE approvals; available in both ANSI or DN in-line sizes 1/4" to 8" (DN 25 to DN 200); insertion length to 72" (183cm)	Model 240 In-line: +/- 1.0% of reading for liquids; +/- 1.5% of reading for gases Model 241 Insertion: +/- 1.2% of reading for liquids; +/- 1.5% of reading for gases; 30:1 turndown	Steam (saturated or superheated) gases and liquids; maximum pressure to 2500 psig (175 barg); temp. to 750°F (400°C)	Fully field configurable; various process connections; permanent or removable retractors for hot tap

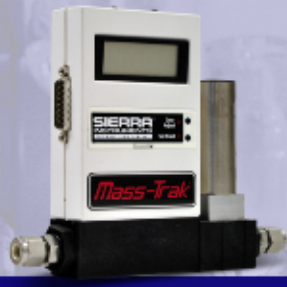


Innova-Sonic®
Model 205
Model 205 Insertion

DESCRIPTION	ACCURACY & REPEATABILITY	MEASURED FLUID	FEATURES
Fixed (dedicated) universal transit-time ultrasonic flow meter. Patented PicoFly™ digital signal processing; NEMA 4X housing; CE approved; clamp-on or insertion transducers; pipes 1" to 200" (25cm to 5 meters); fully field configurable; energy monitoring feature standard	Accuracy: +/-0.5% of reading Repeatability: +/-0.2% of reading	Most liquids; temp. -40°F to 176°F (-40°C to 80°C); bi-directional flow 0 to 40 fps (0 to 12 mps); optional HT to 250F (121°C)	Daily, monthly and yearly totalized flow; hygienic measurement; insertion hot-tap available
	OUTPUT SIGNALS Two 4 to 20 mA inputs for T measurement; pulse output; frequency output via relay and OCT; SD card with data collection program		



GAS FLOW METERS & CONTROLLERS



Mass-Trak® Model 810

DESCRIPTION	ACCURACY & REPEATABILITY	MEASURED FLUID	FEATURES
Affordable gas mass flow controllers with optional local display; built-in set-point control; choice of 3 output signals; 10% glass filled nylon construction	Accuracy: +/-1.5 of full scale Repeatability: +/-0.25% of full scale	Many clean gases compatible with wetted materials; maximum pressure to 150 psig (10 barg)	An exceptional MFC at a low cost; ideal for any OEM or end user; large display; on-board set point; powerful control valve; compact size
	FLOW RANGES * 0-10 sccm to 0-50 slpm	INPUT POWER 24 VDC +/- 10%	
		OUTPUT SIGNALS 4 to 20 mA 0 to 5 VDC 0 to 10 VDC	



Top-Trak® Model 820
Top-Trak® Model 820S

DESCRIPTION	ACCURACY & REPEATABILITY	MEASURED FLUID	FEATURES
Low-cost mass flow meters with large display; minimal insertion pressure drop; optional Totalizer	Accuracy: +/-1.5% of full scale +/-1.0% of full scale (optional 820-S only) Repeatability: +/-0.5% of full scale	All clean gases compatible with wetted materials; maximum pressure for 316 SS: 500 psig (34 barg); Nylon & Aluminum: 150 psig (10barg)	With nearly half a million units installed worldwide, this product remains a favorite of Original Equipment Manufacturers (OEM's) who depend on economical mass flow solutions; Choice of 3 materials of construction; reinforced nylon, anodized aluminum, 316 stainless steel
	FLOW RANGES * 822/824: 0-10 sccm to 0-50 slpm 826/827: 0-75 to 0-175 slpm 822/824S: 0-10 sccm to 0-500 slpm	INPUT POWER 12 to 15 VDC 24 VDC +/- 10% (optional)	
		OUTPUT SIGNALS 4 to 20 mA, 0 to 5 VDC, 0 to 10 VDC	




Side-Trak® Model 830/840

DESCRIPTION	ACCURACY & REPEATABILITY	MEASURED FLUID	FEATURES
High performance analog gas mass flow meters and controllers; 316 stainless-steel construction; minimal pressure drop	Accuracy: +/-1.0% of full scale Repeatability: +/-0.2% of full scale	All clean gases including corrosives and reactives; Maximum pressure to 500 psig (34 barg)	A high quality analog MFC for general applications with 316SS construction; fast response; powerful control valve; patented cleanable sensor Low pressure drop and easy maintenance
	FLOW RANGES * 830L/840L: 0-10 sccm to 0-15 slpm 830M/840M: 0-15 slpm to 0-100 slpm 830H/840H: 0-100 slpm to 0-500 slpm 830N/840N: 0-500 slpm to 0-5600 slpm	INPUT POWER +/- 15 VDC dual sided power	
		OUTPUT SIGNALS 0-5 VDC or 4-20 mA, 0-10VDC, 1-5 VDC (optional)	



Cal=Trak™
Primary Standard Flow Calibrator

DESCRIPTION	ACCURACY	MEASURED FLUID	FEATURES	
Worlds most accurate primary gas flow calibrator! Portable, modular, easy-to-use and affordable; use to verify or calibrate any gas flow meter or controller	SL-500: 0.35% of reading SL-800: 0.15% of reading XL: 0.25% of reading	Suitable for air, nitrogen, helium and other non-corrosive, non-condensing gases	Primary standard; easy one-button operation; fast (reading in less than 60 seconds); flow validation & calibration	
	FLOW RANGES * SL-500/SL-800: 5 sccm to 50 slpm XL: 5 to 500 slpm			INPUT POWER Battery, AC charger included
				OUTPUT SIGNALS RS-232
				

* Note: All flow ranges specified are for equivalent N₂ flow at 760mm Hg and 70°F (21.1°C)

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