

QuadraTherm® 640i with qMix™

No one makes you smarter.

One Thermal Flow Meter Delivers Everything You Need.

QuadraTherm with qMix is like no other thermal flow meter on the market. Patented sensor design coupled with an advanced algorithm set in the QuadraTherm brain delivers all the data you need in one flow meter. Learn 5 revolutionary ways QuadraTherm sets you apart and makes you and your process smarter.

1. WORLD'S MOST ACCURATE THERMAL FLOW METER

Achieve extreme precision with “percent of reading” accuracy rivaling accuracies of Coriolis technology over a wide flow range up to 60,000 sfpm (305 smps).

- +/- 0.5% of reading (inline)
- +/- 0.75 of reading (insertion)
- Industry's only ultra-low flow calibration from 0 to 499 sfpm or any value between for any pure gas or gas mixture
- 40-point calibration available for highest accuracy

2. PATENTED 4-SENSOR TECHNOLOGY

- Three platinum temperature sensors and one patented DrySense mass velocity sensor
- Four-sensor technology provides the critical inputs for the Raptor OS' living, learning algorithm used in the qTherm brain
- Eliminate drift with DrySense™ sensor technology
- Lifetime limited sensor warranty

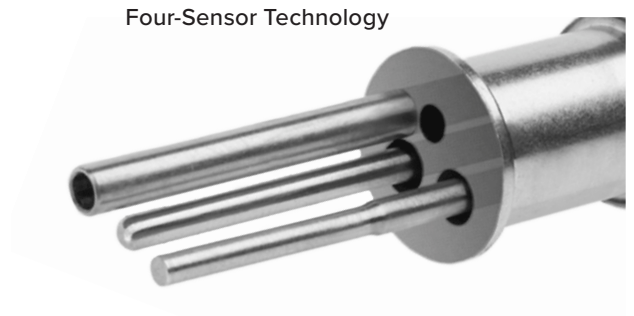
3. QTHERM “BRAIN” OPTIMIZES FIELD INTELLIGENCE

qTherm “brain” manages changes in gas, internal and external temperature, and pressure via a comprehensive heat transfer model using only true variables which instantly calculate precise, stable and accurate mass flow measurement.

- Solves the first law of thermodynamics
- Enables Dial-A-Pipe
 - Insertion - adapt to any pipe size 2 inches or greater and pipe roughness
 - Inline - built-in flow conditioning eliminates straight run requirements



QuadraTherm® 640i
Thermal Mass Flow Meter



Four-Sensor Technology



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4. QMIX MANAGES GAS COMPOSITION CHANGES

- Use qMix software to easily create pure gases or any gas mixture in the field and retain accuracy – no additional factory calibration necessary
- Meet EPA emissions regulations like "Quad O"
- Dial-A-Gas
 - 3 gas slots for any gas or gas mixture you want; air comes standard
 - Accommodates multiple full scales for same gas or gas mixture
 - Capable of increasing full scale by 2x
- Use "My Gases" Library to store unlimited new qMix gas compositions
- qMix RealTime Flare Management System (FMS) Delivers Real-Time Flare Gas Measurement:
 - qMix RealTime app connects, reads and updates new flare gas composition from a GC-real time, no recalibration needed
 - Meet EPA rule 40 CFR 63-measure flare gas down to 0.1 sfps (0.03 smps) where ultrasonic flow meters can't operate
 - Easy to install with current ultrasonic flow meters, no process shutdown



Additional Features

- No moving parts
- Hot-tap for easy install-no process shutdown
- InSitu calibration with the ValidCal app validates original calibration in the field
- Digital communications available
 - HART, Modbus, Fieldbus
- Approvals available
 - cFMus – Explosion proof for Class 1, Div 1, Groups B,C,D
 - CE – European Conformity
 - ATEX/IECEx
 - Canadian Registration (CRN number)
 - GOST R
 - Chinese Pattern

WATCH VIDEO

sierrainstruments.com/qmix-realtime-video

5. WORLD-CLASS FLOW CALIBRATION

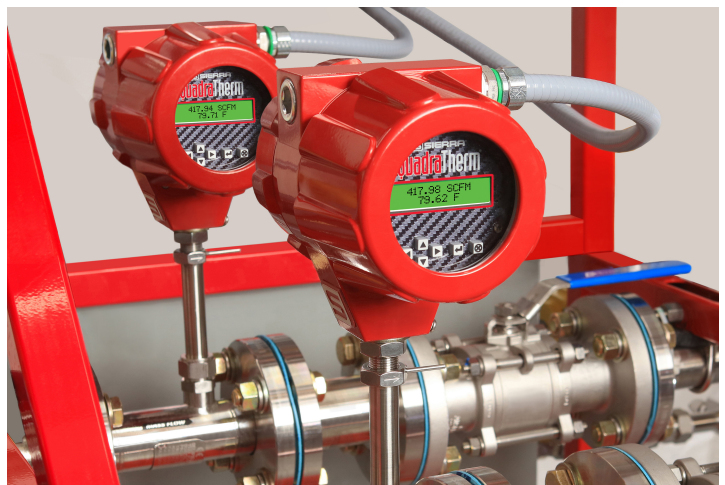
- Advanced gas loop delivers highest accuracy
- Specifically designed for industrial thermal calibration - Over \$2 million invested
- Closed gas loop with pressurization, temperature control and NIST traceable calibration standards
- Calibrated full scales up to 30,000 sfpm, any gas or gas mixture
- Calibrated full scales up to 60,000 sfpm with slight de-rate of accuracy for any gas or gas mixture

LEARN MORE

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