

deltaCal Volumetric Air Flow Calibrator

Designed to go anywhere, indoors or out. From the top a 15,000 ft mountain to a 55° C desert or a -30° C snow field, the NIST traceable deltaCal is pulsation free, accurate to less than 0.75% of the flow rate reading.

All deltaCal® systems are built and tested at Mesa headquarters which is both a NIST traceable Calibration Laboratory and an ISO 9001:2008 facility.



Features

- Venturi-based calibrator
- Fully NIST-traceable
- 0.75% accuracy per reading
- One switch (off/on) operation -- all data displayed on screen
- No moving parts, completely silent
- 20 hour battery life (requires 4 AA batteries)
- Furnished with universal power supply (120/240 VAC)
- Supplied software with download and reporting capability
- Displays actual and standard flow rates

deltaCal Specifications

Flow Rate Range (3 Models):	2 – 19.5 LPM - DC1 10 – 60 LPM - DC100 0.8 – 3.5 LPM - DC200
Temp Operational Range:	-30° C to 55° C (EPA requires up to 40° C)
Temp Reading Range:	-40° C to 55° C
Baro. Pressure Range:	400 to 800 mm of Hg (U.S. version) 534 to 1066 milibars (Euro version)
Dimensions of Measuring Head:	5 in. Max OD (12.7 cm) X 10 in. high (25.4 cm)
Dimensions of Control Module:	8 in. high (20.3 cm) X 4 in. wide (10.15 cm) X 1.7 in. thick (4.32 cm)
Combined Weight:	2.2 lbs (1 kg)

Applications

- Calibration and audits of PM_{2.5} and PM₁₀ samplers in accordance with U.S. EPA requirements
- May be used on any sampler in the 2 to 19.5 LPM, 10-60 LPM, 0.8-3.5 LPM range
- Calibration of European PM₁₀ samplers operating at 38.4 LPM using the DC100
- Calibration of 50 LPM DICOT samplers and standard DICOT Samplers

deltaCal Ordering Information

Part # DC1:	deltaCal (calibration range 2-19.5 LPM), complete in carrying case
Part # DC100:	deltaCal (calibration range 10-60 LPM)
Part # DC200:	deltaCal (calibration range 0.8-3.5 LPM), complete in carrying case
Part # 188125:	Adapter - deltaCal to 3/8 in. hose barb (use with SASS or TEOM)
Part # DC11:	Adapter - deltaCal to 1/2" Hose Barb
Part # DC2:	Extension Temperature Probe
Part # DC3:	120-240 Volt Power Supply
Part # CA9030:	Fitted Hard Carrying Case
Part # 188166:	deltaCal O-ring Kit
Part # /400-128:	ReCert of deltaCal
Part # /400-136:	Pre-Cal/ReCert of deltaCal

All calibrations include NIST Traceable certificate

tetraCal® Volumetric Air Flow Calibrator

The BGI tetraCal® is a simple-to-use, NIST Traceable Standard for volumetric air flow, barometric pressure, and ambient temperature.

The tetraCal® is a venturi based system with built-in compensation for changes in ambient temperature and pressure. Three Venturis are available to cover a total flow range from 0.1 to 30 LPM.

All tetraCal® systems are built and tested at Mesa headquarters which is both a NIST traceable Calibration Laboratory and an ISO 9001:2008 facility.



Features

- Simple ON/OFF operation -- all data displayed on screen automatically
- Venturi-based calibrator
- Portable
- 20 hour battery life (4-AA)
- Furnished with universal power supply (120/240 VAC)
- Supplied software with download and reporting capability
- 0.75% accuracy per reading

tetraCal Specifications

Flow Rate Range:	0.1-30 LPM (actual volumetric reading) 1-60 LPM (actual volumetric reading)
Temp Operational Range:	-30° C to 55° C
Temp Reading Range:	-40° C to 50° C
Baro. Pressure Range:	400 to 800 mm of Hg (U.S. version) 534 to 1066 milibars (Euro version)
Dimensions of Control Module:	3.25 in. high (8.25 cm) X 3.125 in. wide (7.94 cm) X 9 in. long (22.86 cm) Height with venturi and hose adaptor 6.30 in (16.00cm)
Weight with Venturi:	2.38 lbs (1.08 kg)
Dimensions of Carrying Case:	15.75 in. wide (40.00 cm) X 4.5 in. high (11.43 cm) X 12.25 in. thick (31.20 cm)
Weight Complete with Contents:	4.69 lbs (2.13 kg)
Accuracy:	0.75% of reading

Applications

- Calibration of environmental and industrial hygiene air sampling instruments
- Calibration and audits of speciation and particulate samplers to U.S. EPA requirements
- May be used on any sampler in the 0.1 to 30 LPM and 1 to 60 LPM range
- Suitable for calibration of cascade impactors

tetraCal Ordering Information

Part # TC5:	tetraCal®, complete in fitted case (0.1-30 LPM)
Part # TC12:	tetraCal®/EPA speciation audit model with temperature probe (0.1-30 LPM)
Part # TC17:	tetraCal-Ultra/EPA speciation audit model with temp probe (1-60 LPM)
Part # TC14:	tetraCal-Ultra, complete in fitted case (1-60 LPM)
Part # TCIMP:	tetraCal® adapters (3) for use with the Improve Sampler
Part # /400-129:	ReCert of tetraCal
Part # /400-137:	PreCal/Recert of tetraCal
Part # TC9:	tetraCal O-ring kit

All calibrations include NIST Traceable certificate