

# testo 420 Flow Hood System

Accurate, lightweight and rugged.



- CFM
- FPM
- °F
- %RH
- Absolute Pressure
- Diff Pressure
- Wet Bulb
- Dew Point

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Integrated flow straightener **greatly improves** measurement at turbulent outlets

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Weighs less than 6.4 lbs. (2.9 kg.)

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Detachable 420 Differential Pressure instrument with large backlit display can be tilted to optimize viewing angle

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Quick, easy remote monitoring and reporting with Bluetooth and free App

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Data logging using on-board 2 GB memory, logged data can be transferred to PC using mini-USB cable.

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The new testo 420 flow hood system is light, accurate and a convenient solution for balancing volume flow at supplies and returns. At turbulent outlets, the flow straightener significantly improves measurement accuracy, saves time and eliminates the uncertainty of measuring turbulent outlet ducts. Handling is especially easy with its ergonomic handles and low weight of less than 6.4 lbs.

The 420 Differential Pressure instrument can be tilted for optimum viewing angle.

The powerful App is configured to:

View measured data from a remote location wirelessly on smartphone / tablet (65ft.).

Log data and display results then transfer to PC using micro-USB cable.

Send measured values via email as a report file in .pdf or Excel format

Runs with devices using Android 4.3 or iOS 7.1 and higher

# Technical data

**testo 420 Flow Hood System Set**

Includes: testo 420 flow hood base, **t420 Differential Pressure Instrument, Pitot Flow Matrix, 24" x 24" flow hood with supporting rods**, USB cable, batteries, soft case w/handle and wheels and **Optional NIST Certification**



Part no. 400563 4200

### General technical data

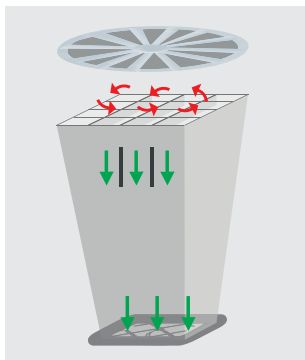
Operating temperature	23 to 140 °F (-5 to +60 °C)
Storage temperature	-4 to 140 °F (-20 to +60 °C)
Weight	6.4 lbs. (2.9 kg)
Standard hood	24" x 24" (610 x 610 mm)
Battery type	Type AA
Battery life	30 hrs
Display	Dot matrix <b>LCD with backlight</b>
Memory	2 GB internal
Interface	Micro USB
NIST Certification	Optional
Warranty	2 years

### Key Features:

- \* Data logging directly to on-board 2 GB memory.
- \* Convenient joystick navigation within menu for setting up individual folders
- \* Total volume flow in CFM (cubic feet per minute) is displayed
- \* Individual measurement data saved in folders can be recalled and displayed as total volume flow of all measurements.
- \* Logged data can be transferred to PC using micro-USB cable

### Measurement Specifications:

	Flow Volume	Flow Velocity	Air Flow Temperature	Differential Pressure	Absolute Pressure	Relative Humidity	Dew Point/Wet bulb
Measuring range	25 to 2,300 CFM (40 to 4000 m³/h)	0 to 2750 ft/min (0 to 14 m/s)	-4 to <b>140°F</b> (-20 to +60 °C)	-0.5 to 0.5 inH2O (-120 to 120 Pa)	700 to 1100 mbar	0 to 100 %RH	<b>23 to 140°F</b> / -104 to +140 °F)
Accuracy	±3 % of m.v. +7 cfm	±2.0 ft/m (0.01 m/s)	<b>±0.9 °F (23 to 140 °F)</b> ±0.5 °C (-5 to 60 °C)	±2 % of m.v. +0.02	+/-3mbar	±1.8 %RH +3% m.v.	Not Specified
Resolution	1.0 CFM	0.01 ft/min (0.0001 m/s)	0.1 °F	0.000001 inH2O	0.1 mbar	0.1 %RH	0.1 °F



Functional principle of the flow straightener.



Flow straightener significantly improves accuracy of measurements at turbulent outlets.



Bluetooth App allows for hands free operation, displaying measurement data on mobile devices and finalizing **and sending the measurement report** via email from the job site



Sturdy, wheeled tripod (optional) with central fitting for safe measuring of high ceiling outlets.

# Accessories

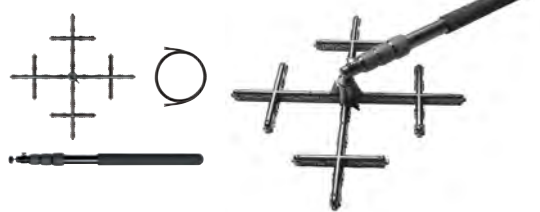

Part no.

Flow Hood 12" x 12" (360 x 360 mm)	0554 4200
Flow Hood 12" x 48" (305 x 1220 mm)	0554 4201
Flow Hood 24" x 48" (610 x 1220 mm)	0554 4202
Flow Hood 36" x 36" (915 x 915 mm)	0554 4203
Tripod, extendable to 13' (4m)	0554 4209
Connection hose; silicone; length 16.4' (5m); max. load 280 inH2O (700 mbar)	0554 0440
Connection hose silicone-free for differential pressure measurement, length 16.4' (5m), load up to maximum 280 inH2O (700 mbar).	0554 0453
NIST Flow Hood System Certification	400520 4403



## Air Flow Velocity Matrix

Air flow velocity matrix, 6ft telescopic extension pole with ball swivel head, two 6ft silicon-free connection hoses. Velcro strap for attaching the differential pressure measuring instrument to the telescoping extension pole

	To order as SET use ID no. 0699 7077/1	0635 8888
	To order as SET use ID no. 0699 7077/2	0635 8888

Connection hose required (order no. 0554 0440) or (order no. 0554 0453)

Pitot tubes	Dimensions Probe shaft/probe shaft tip	Measuring range	Part no.
Pitot tube, 20 in. (0.5 m) long, .28 in. Dia. (7 mm), stainless steel, for measuring flow velocity*	20 in. (0.5 m) .28 in. Dia. (7 mm)	<b>Measuring range: 200 to 2,750 ft/min (1 to 14 m/s)</b> <b>Operating temperature: 32 to 1,112 °F (0 to 600 °C)</b> <b>Pitot tube factor: 1.0</b>	0635 2045
Pitot tube, 14 in. (0.35 m) long, .28 in. Dia. (7 mm), stainless steel, for measuring flow velocity*	14 in. (0.35 m) .28 in. Dia. (7 mm)		0635 2145
Pitot tube, 39.4 in.(1.0 m) long, .28 in. Dia. (7 mm) stainless steel, for measuring flow velocity*	39.4 in.1.0 m .28 in. Dia. (7 mm)		0635 2345



**Precision measurements for critical applications**



**Detachable Differential Pressure (t420) instrument** allows Pitot tube measurements in ducts (Pitot tube optional)

D.O.V1

Subject to change without notice.