

## A Revolutionary GC Tool



that simultaneously measures

volumetric flow and mass flow  
and pressure and temperature  
and detects leaks

and costs less  
and works great.

**Wow!**

Now everybody will want one.



**Agilent Technologies**  
Innovating the HP Way

# Introducing the Agilent Flow Trackers

The Agilent Flow Tracker 1000 and 2000 are a new family of versatile, handheld gas chromatography tools that combine traditional flow meter functions with exceptional value.

Designed specifically for the gas chromatographer who wants to maximize their GC's performance and troubleshoot problems, these instruments can precisely measure all column flows, split ratios, linear velocity, and detector gases quickly and more accurately. And with the Flow Tracker 2000, you can do all of this PLUS identify leaks, too!



## Flow Measurement and Leak Detection in a Single Box

A revolutionary concept, we have put two key GC capabilities into a simple-to-use handheld design for less than the cost of the typical leak detector. The Flow Tracker 2000 is the most complete GC tool for routine operation, system optimization, and troubleshooting on the market today. Along with all the features of the Flow Tracker 1000, the Flow Tracker 2000:

- Infers leakage rate of selected gas in ml/sec
- Screens out interference from background gases (zero function) in tight places for increased sensitivity
- Has an audible leak detector signal with a frequency that varies with relative thermal conductivity
- Includes a user-selectable display for your choice of leak indication by Relative Conductivity, Thermal Conductivity, or Inferred Leak Rate
- Has a detachable probe that can be removed when not in use

## More Accurate and Reproducible Results

Unlike competitive flow meters that choose to ignore temperature and pressure factors, the Flow Trackers incorporate these variables into the flow calculations of the actual gas being measured. This feature makes the Flow Trackers the most accurate flow meters available. Now you don't have to worry about error contribution from ambient temperature and pressure conditions that can adversely affect other types of flow meters and jeopardize your results.

With the Flow Tracker's wide dynamic range of measurement from 0 – 500 ml/min, there is no need for two separate flow meters to measure both capillary and standard GC flow rates. A straight-through flow path virtually eliminates back pressure to deliver the most precise low flow measurements.

Also, because the Flow Trackers measure flow without disruption of the flow source, they are the ideal companion to the Agilent 6890 and 6850 gas chromatographs with Electronic Pressure Control.

## Two Year Calibration Period

The inherent long term stability of the Flow Tracker's solid state components allows Agilent to offer the longest guaranteed calibration period of any flow meter on the market today. Instead of returning your Flow Tracker every year and dealing with the expense and inconvenience of this service, you can rest assured that your flow meter is still under calibration and working dependably for a minimum of two years. These savings can literally pay for your Flow Tracker over the course of its lifetime!

Each unit is shipped with a Multipoint Calibration Certificate traceable to NIST certified standards. Flow Trackers are CE compliant and manufactured according to ISO 9001 guidelines.

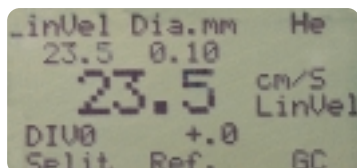
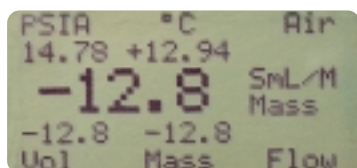


## Ease of Use

Operation is simple, with all functions controlled by buttons surrounding the easy-to-read display. The Flow Tracker's LCD in flow mode simultaneously displays mass flow, volumetric flow, temperature, and pressure of the gas being measured, giving you the most complete set of accurate information possible. The primary display shows the measurement of interest and can easily be toggled to any of the other parameters. The soft vinyl outer covering provides protection and comfort.

An optional universal AC power adapter is available for continuous in-line flow monitoring applications.

The automatic shutoff feature activates after 5 minutes of low flow to conserve battery life. This feature is overridden when the AC adapter is used. A low battery indicator warns of impending battery failure.



The Flow Trackers measure mass and volumetric flow, continuously, with temperature and pressure, to give the most accurate information possible. Convenient buttons allow quick selection of display options.



## Flow Tracker 1000 and 2000 Flow Measurement Specifications

<b>Flow Range</b>		0 – 500 ml/min
<b>Accuracy</b>	Flow	± 2% of reading (± 0.2 ml/min) linear through zero
	Temperature	± 0.5 °C
	Pressure	± 0.5 % of reading
<b>Sensor Type</b>	Flow	Solid state piezoresistive flow sensor with measurement in the laminar flow region (No heated elements)
	Pressure	Absolute Pressure Sensor
	Temperature	Integrated circuit absolute temperature sensor (no RTD's)
<b>Calibration</b>		NIST traceable Multipoint Calibration Certificate included
<b>Calibrated Gases</b>		Nitrogen, Hydrogen, Helium, Air, Carbon Dioxide, Methane, 95% Argon / 5% Methane
<b>Modes</b>		Flow, GC, Leak Detection (Flow Tracker 2000 only)
<b>Display</b>		Dynamically labeled multi-function 7 line LCD with 99 characters
<b>Power</b>		Six AA Batteries (included) or optional universal AC power adapter
<b>Dimensions</b>		8.30"(h) x 3.75"(w) x 1.90"(d)
<b>Certification</b>		CE Mark, meets EMC and Low Voltage Directive
<b>Pressure</b>		100 psi maximum
<b>Digital Output</b>		RS-232 output for all variables for selected mode, no special software required
<b>Inlet and Outlet Ports</b>		1/8" female NPT threads
<b>Accessories</b>		RS-232 cable, stand, batteries, 1/8" and 1/16" barbed fittings

## Flow Tracker 2000 Leak Detector Specifications

<b>Sensor Type</b>	Solid state Thermal Conductivity Detector; low power consumption for extended battery life
<b>Response Time</b>	1 second
<b>Sensitivity</b>	1 x 10 <sup>-5</sup> ml/sec for He
<b>Gases</b>	Common chromatography gases with a thermal conductivity significantly different than air and its components*
<b>Detection</b>	Relative Conductivity, Thermal Conductivity, Inferred Leak Rate, Audible Signal

\*Other gases are detectable but not quantifiable

## Ordering Information

Description	Agilent Part No.
Flow Tracker 2000	5183-4780
Flow Tracker 1000	5183-4779
Accessories Kit*	5183-4788
Universal AC Adapter	5183-4781
*Accessories Kit Includes: General Purpose Adapter, Split Vent Adapter, and a Capillary Column Adapter.	



## WOW!

### How can I get a Flow Tracker?

Contact your local Agilent sales office or an Agilent authorized distributor to make the Flow Tracker part of your GC toolkit, or visit our web site at **[www.agilent.com/chem/supplies](http://www.agilent.com/chem/supplies)**

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