

# Agilent 1260 Infinity Analytical SFC System

## Features, Specifications and Ordering Details

### Easy-to-use SFC system for chiral and achiral separations

The Agilent 1260 Infinity Analytical SFC System provides LC-like sensitivity and UHPLC power range. Unique SFC/UHPLC switching capability with the SFC/UHPLC Hybrid system provide two orthogonal separation modes in one single system. This enables intelligent screening for the best suitable method and delivers comprehensive information for complex samples and impurity analysis. The Agilent 1260 Infinity Analytical SFC solution include the broadest and most versatile SFC price/performance range – from simple SFC upgrades to pre-existing 1100/1200/1260 LC systems to full SFC/UHPLC/MS solutions.



### Features

- Available as complete system or as upgrade to existing Agilent 1100, 1200 and 1260 LC systems
- Unique switching capability between UHPLC/SFC in a single system without equilibration
- Only SFC system with 600 bar capability
- Different solvent selection choices for a wide range of organic modifiers to exploit unique selectivity
- UHPLC-like sensitivity
- Ten- to fifteen fold lower operating costs by using standard grade gaseous CO<sub>2</sub>
- Optional column screening kit or full method development features available for fast, straightforward column and modifier selection
- MS compatibility with the Agilent 6100 Series Single Quadrupole LC/MS systems
- Low solvent consumption and less waste generation for true green chemistry
- Agilent instrument and service quality and IQ/OQ services available

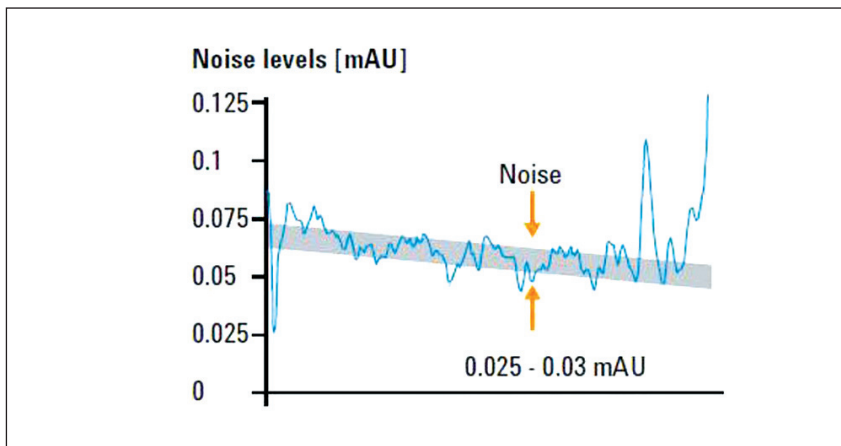


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## Technical Performance

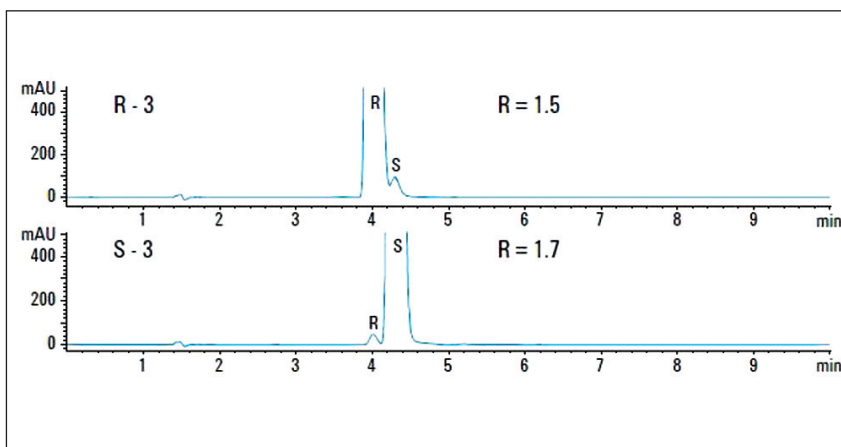
### HPLC-like sensitivity in UV due to lowest detector noise

Lowest noise levels in SFC/UV detection due to superior CO<sub>2</sub> conditioning.



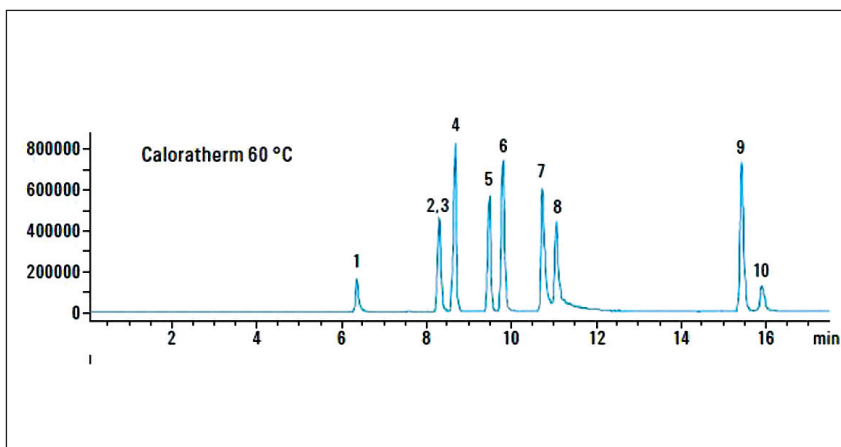
### Unique selectivity for chiral and achiral compounds

Highest sensitivity in chiral impurity analysis.



### Superior MS performance

SFC/MS analysis (SIM signal) with superior area reproducibility and high sensitivity in APCI and ESI mode with the Agilent 1260 Infinity Analytical SFC System and the Agilent 6100 LC/MS detector with a pharmaceutical 10-compound mixture.

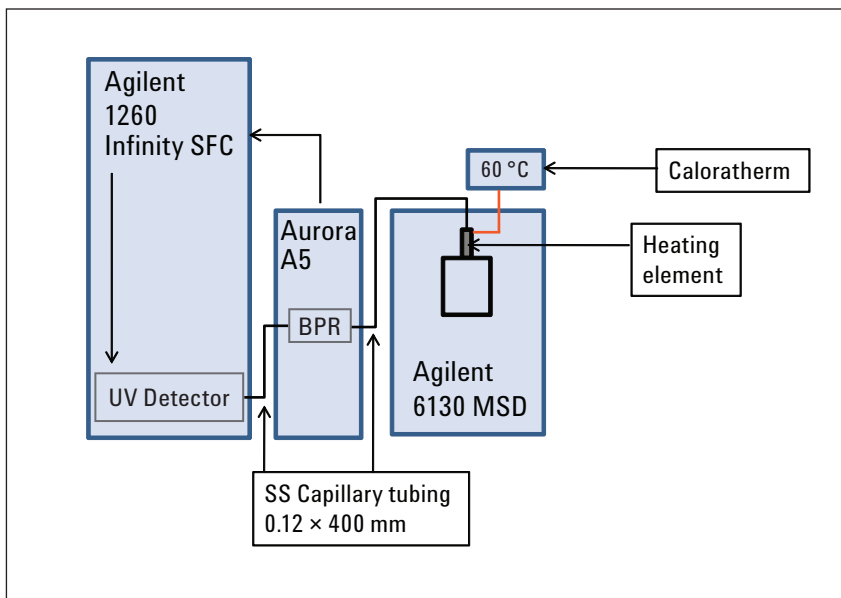


## Agilent 1260 Infinity Analytical SFC with MS

The Agilent 1260 Infinity Analytical SFC System can be operated with the Agilent 6100 Series MS detectors. This allows precise mass determination and the detection of compounds that carry no chromophore. Together with the MS connection kit a makeup flow pump and the Caloratherm capillary heater a sensitivity increase of at least 10x is possible. Both APCI and ESI sources can be used. Major applications include chirals, normal phase, lipids, sterols, biofuels. The following two configurations are possible.

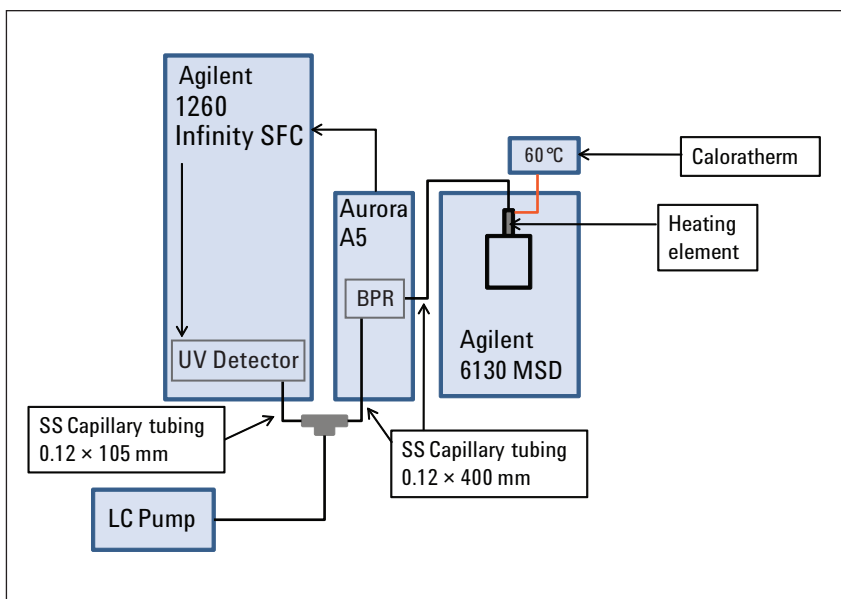
### Agilent 1260 Infinity SFC/6130 MSD – without make-up flow pump

- Less costly
- 5 mL/min flow rate
- Recommended for qualitative information, general screenings, method development
- Not recommended for quantitative work



### Agilent 1260 Infinity SFC/6130 MSD – with make-up flow pump

- Superior area reproducibility and robustness
- Acids can be added to enhance selectivity
- Limitations: Only up to 3 mL/min flow rate
- Recommended for quantitative work



## Specifications – Agilent 1260 Infinity Analytical SFC System

Pumping System	
Flow range:	Up to 5 mL/min
Composition range:	0–100%
SFC primary fluid:	CO <sub>2</sub>
Metering pump noise:	< 1%

Back Pressure Regulation	
Back pressure regulator range:	100–400 bar
Back pressure regulator noise:	< ± 0.5 bar

DAD	
Short-term noise (ASTM):*	< ±0.05 mAU at 254 nm typical
Wavelength range:	190–950 nm

## Ordering Details – Agilent 1260 Infinity Analytical SFC System

Description	Product Number
<b>Agilent 1260 Infinity Analytical SFC System with DAD</b> Includes Aurora A5 Fusion Module, Solvent Cabinet, Degasser, SFC Binary Pump, SFC Standard Autosampler, DAD Detector, Thermostatted Column Compartment, and SFC Accessory Kit including high pressure flow cell.	G4309A
<b>Agilent 1260 Infinity Analytical SFC System with MWD</b> Includes Aurora A5 Fusion Module, Solvent Cabinet, Degasser, SFC Binary Pump, SFC Standard Autosampler, MWD Detector, Thermostatted Column Compartment, and SFC Accessory Kit including high pressure flow cell.	G4309A#01
<b>Agilent 1260 Infinity SFC upgrade bundle</b> Includes Aurora A5 Fusion Module, SFC Binary Pump, and SFC Accessory Kit including high pressure flow cell.	G4308A
<b>Agilent 1260 Infinity Hybrid SFC/UHPLC System</b> As add on to G4309A/G4308A you can select the following: <ul style="list-style-type: none"> <li>• 1290 Infinity Universal Valve Drive .....G1170A</li> <li>• 2-position/10-port Valve.....G4232A or B</li> <li>• SFC/UHPLC Hybrid Capillary Kit .....G4306A</li> <li>• Any of the following 1260/1290 Infinity analytical pumps                             <ul style="list-style-type: none"> <li>• 1260 Infinity Quaternary Pump .....G1311B</li> <li>• 1260 Infinity Binary Pump .....G1312B</li> <li>• 1260 Infinity Isocratic Pump .....G1310B</li> <li>• 1290 Infinity Binary Pump .....G4220B</li> </ul> </li> </ul>	
<b>Agilent 1260 column screening upgrade kit</b> Includes hardware to screen up to 6 x 250 mm SFC columns in thermostatted column compartments.	G4307A
<b>Agilent MS Connection Kit</b> Includes capillary kit and T-piece to connect the 6100 Series MS detector with the 1260 Infinity Analytical SFC System. Capillaries can be connected to an APCI or an ESI ion source.  Note: A make-up pump (G1310B) needs to be ordered separately. Note: Caloratherm heater (PN: AG1) and preheater (PN: AG004) are required and need to be ordered separately from Sandra Selerity Technologies at info@richchrom.com	G4309-68000

[www.agilent.com/chem/sfc](http://www.agilent.com/chem/sfc)

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