

Agilent 1220 Infinity LC Goes Mobile!

Measure non-volatile
impurities in your mobile lab



Agilent 1220 Infinity Mobile LC Solution

1200 Infinity
Series

When samples of interest are locally remote from the lab, the lab has to come to the samples.

The **Agilent 1220 Infinity Mobile LC Solution** is an Agilent 1220 Infinity Gradient LC with integrated Variable Wavelength or Diode Array Detector and a **Mobile Upgrade Kit** that enables transportation.

The Mobile LC at a Glance



Isocratic¹ or dual gradient pump with integrated degasser, 600 bar, up to 10 mL/ min, SSV can be added

Sampler with injector programming, expandable to walk-up

80°C oven, 25 cm columns

VWD or DAD², 80 Hz

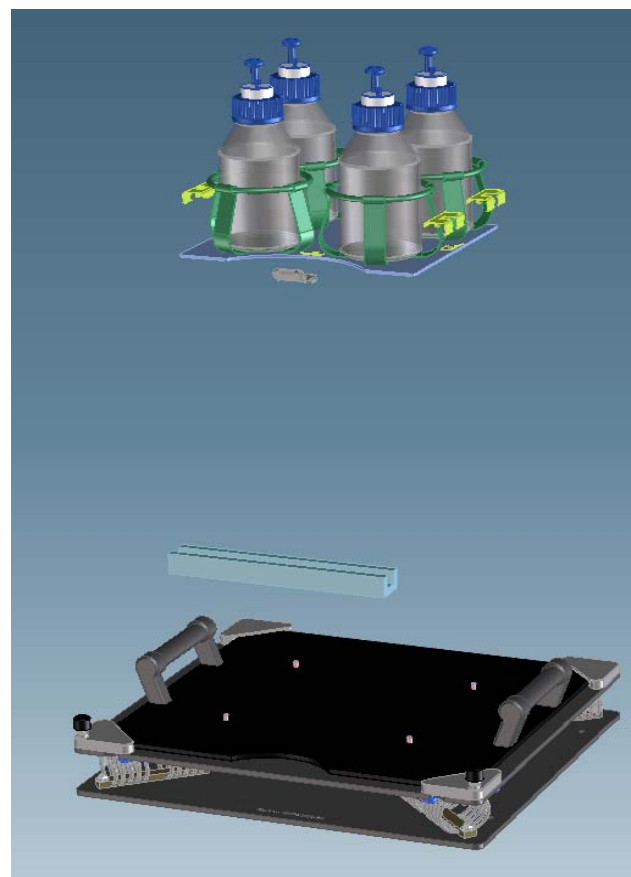
Agilent 1220 Infinity LC Mobile Upgrade Kit

The Agilent 1220 Infinity LC Mobile Upgrade Kit consists of several functional parts that enable the 1220 Infinity LC to be mounted into a **mobile lab** so it can be moved around different locations to access **remote measurement sites**.

The **main component is the 'attenuation unit'** which acts as a **shock absorber** to protect the instrument during transit or from influences of operators moving in the mobile lab.

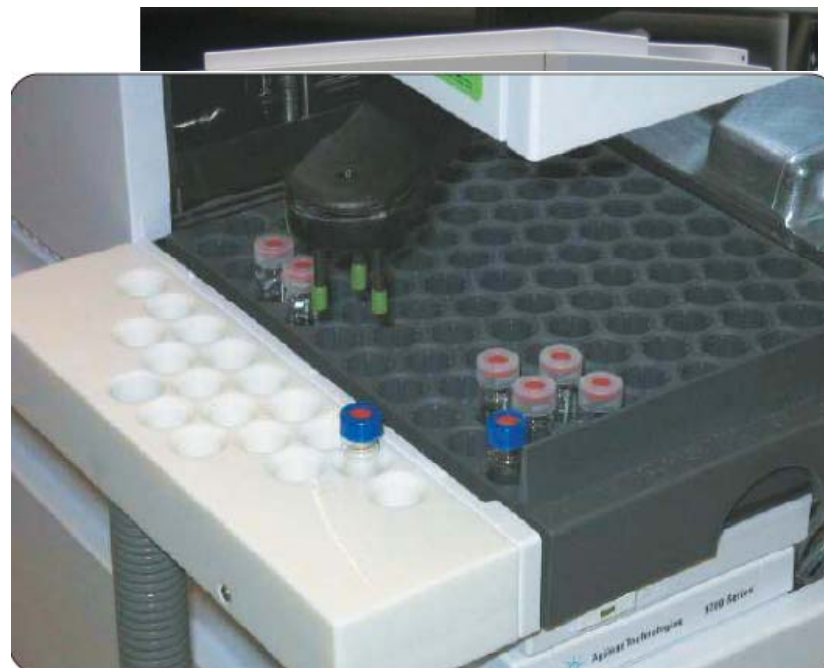
A **solvent bottle unit keeps** the bottles fixed to the instrument.

A **column wire mesh** secures the column in the column heater.



Walk-Up Agilent 1220 Infinity LC: G4291A

...an automated Agilent 1220 Infinity LC with external tray and Easy Access software (G2725AA)



Usage of Walk-Up Agilent 1220 Infinity LC

- In **drug discovery**, it is common for one LC/MS system to be shared by many medicinal chemists.
- System should be capable of **rapidly running large numbers of different samples** without need to pause the system.
- System should also be **rugged enough** so that it is difficult for an **untrained chemist** to put the system in a state that will either shut down the LC/MS or cause bad data to be produced for subsequent samples.



Agilent Easy-Access - STATUS

5 runs in queue (est. 22 mins 30 secs to completion)

Sample Queue

Vial	Batch	Notebook #	+/-	Method	Data file
>> 1	lot_15	zeg_234		Default Method	ZEG_2341-120407.D
1 2	lot_15	zeg_235		Default Method	ZEG_2351-120407.D
2 3	lot_15	zeg_236		Default Method	ZEG_2361-120407.D
3 4	orga_43	orga_423_1		Standard Gradient	ORGA_423_11-120407.D

JobID	User	Group	LoginDate
1	galley_3	MS Chemist	02/01/07 17:07:39
2	lot_23	Chemist	02/01/07 17:04:14
3	23_jan_07	Chemist	02/01/07 16:22:04
4	top_cut	MS Chemist	02/01/07 15:47:16

100 2ml vials. —

Submit New Sample

Features

- Dual gradient pump with integrated degasser, 600 bar, up to 10 mL/ min, for reliable and robust analysis
- Vial sampler with injector programming, expandable to walk-up
- 80°C oven for one 25 cm column
- Variable wavelength or diode array detector with 80 Hz sampling rate for highest sensitivity
- Mobile Upgrade Kit with Attenuation Unit for vibration resistance
- Walk-Up Upgrade Kit with external tray for easy sharing of one instrument for LC/MS analysis

Advantages

Uniqueness:

- Small footprint
- Agilent 1260 Infinity performance at lower price
- Ease of use
- Vibration resistant with Mobile Upgrade Kit

Flexibility:

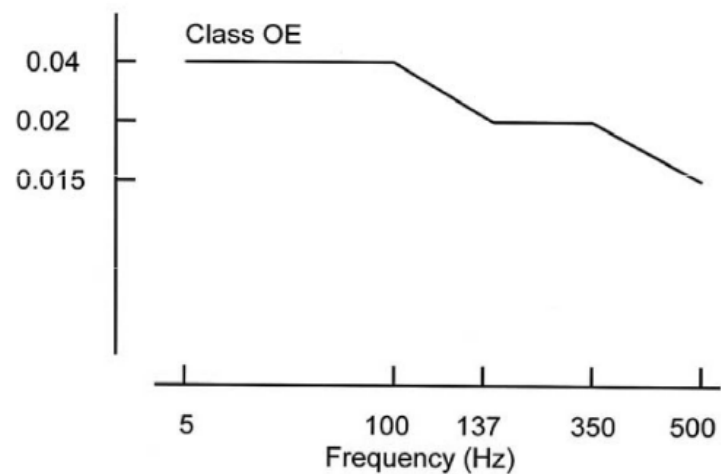
- Upgrades for any use
- Can add any detector, GC or an Agilent 6120 single quad mass spectrometer
- Walk-Up with Easy Access SW

Agilent 1220 Infinity LC Mobile Vibration Tests

Survival

Frequency Slope PSD

Value of area under the integrated curve: ~3.41 grms
Duration: 10 minutes
(minimum)

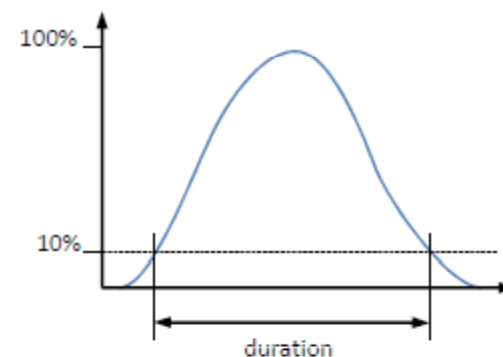


Agilent 1220 Infinity LC Mobile Vibration Tests

Shock

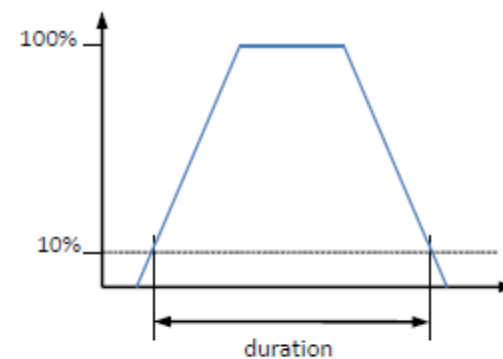
half-sine waveform

Duration < 3ms,
Velocity change of 4.24 m/s
Drop height: 100mm



trapezoidal waveform

Duration < 3ms,
Velocity change of 5.23 m/s
Minimum acceleration: 30g



Applications

- **Environmental:** Non volatile pesticides
- **Food Safety:** Pesticides, pollutants in food
- **DOA testing:** Designer drugs at discotheques
- **Clinical:** Drug monitoring at mobile clinics
- **Pharma:** Impurity analysis (mobile QC), rural testing of counterfeit drugs

Typical System Set-Up

1200 Infinity
Series

PN	Description
G4294B	1220 Infinity LC with DAD
M8311AA	OpenLAB CDS ChemStation VL
M8360AA	OpenLAB CDS 3D UV-Add-On
G4292A	1220 Infinity Mobile Upgrade Kit
G4291A	1220 Infinity Walk-up Upgrade Kit

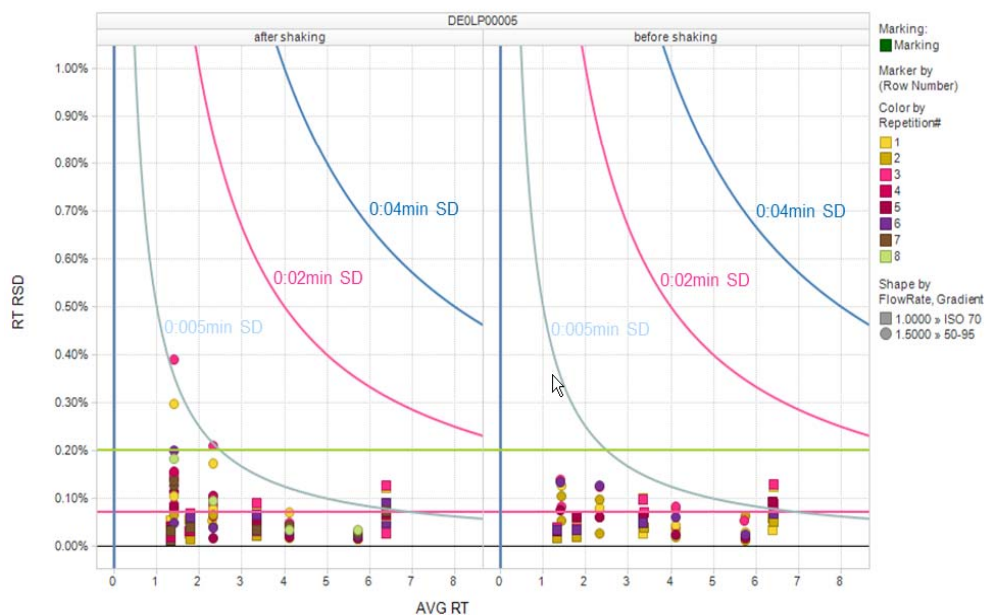
Mobile Kit: Accessories

PN	Description		
5043-0225	Safety Cap I with 1 shutoff-valve (GL45). Comes with one venting valve (5043-0232)		
5043-0232	Venting valve with 1um PTFE membrane		
5043-0243	10 Liter PEHD waste can. Comes with a S60 safety caps (5043-0227) including 4 ports + 1 leak port. The charcoal filter must be ordered separately (5043-0230).		
5043-0828	Conductive safety funnel PEHD with cover for S60 can.		
5043-0230	Charcoal filter (48g)		

Superior Performance

RT RSD is less than 0.2%

Retention time RSD before and after shaking



Extended Agilent 1220 Infinity LC Portfolio

A 600 bar, 80 Hz System in Four Configurations



G4286B

Isocratic Pump
Man Injector

VWD



G4288B

Gradient Pump
Man Injector

VWD



G4290B

Gradient Pump
ALS
Column Oven

VWD



G4294B

Gradient Pump
ALS
Column Oven
DAD

Extended Agilent 1220 Infinity LC Portfolio

Upgrades

PN	Description	Comments
G4291A*	1220 Infinity Walk-up Upgrade	Adds side panel with hole and external tray to ALS 1220s. Order with Easy Access SW (G2725AA)
G4292A*	1220 Infinity Mobile Upgrade	Adds Mobile Kit to gradient systems (G429B/C and G4294B) for Earthquake Safety and van users. Order with safety caps and waste container.
G4297A	1220 Infinity Oven Upgrade	Adds oven to G4286B or G4288B/C system.
G4298A	1220 Infinity ALS Upgrade	Adds ALS to 1220 manual injector system (G4286B, G4288B/C).
G4299A	1220 Infinity Gradient Upgrade	Adds gradient unit to 1220 isocratic system (G4286B)

Agilent 1220 Infinity LC on Tour

1200 Infinity Series



Summary

- Agilent 1220 Infinity LC is an easy-to-use small footprint LC which can be expanded to any application
- A Mobile Upgrade Kit enables transportation
- Variable OpenLAB CDS EZChrom/ ChemStation control meets all user needs

