

## Albania

Inalab  
Phone: +355-4-23 02 82  
koci@albmil.com

## Algeria

SÓBOBAT SA  
Phone: +212-2-23 01 85  
sobobat@marocnet.net.ma

## Austria

Agilent Technologies  
Österreich GmbH  
Phone: (01) 25125-6800  
Fax: (01) 25125-7365  
analytik\_austria@agilent.com  
www.agilent.de

Wagner & Munz GmbH Austria  
Phone: (01) 599994-80  
office@wagnermunz.com  
www.wagnermunz.com

## Belarus

Interlab Inc.  
Phone: +7 095 973 2033/34/35  
interlab@apg.ru

## Belgium

Agilent Technologies  
Belgium SA/NV  
Phone: +32 (0)2-4049222  
cag\_belgium@agilent.com

Devos-Francois SA/NV  
Phone: +32 (0)71-440870  
mail@d-f.be

Merck-Eurolab  
Phone: 32 (0) 16 385011  
info@merckeurolab.be

## Bulgaria

Team Ltd.  
Phone: 359-2-951-6883  
team\_cag@netbg.com

## Croatia, Bosnia and Herzegovina

DANJAR d.o.o.  
Phone: +385 1 365 5288  
danjar@danjar.hr  
www.danjar.hr

## Denmark

Agilent Technologies A/S  
Phone: +45 7013 0020  
Fax: +45 4582 0630  
susanne\_knudsen@agilent.com

## Estonia

OU Melestrum  
Phone: +372-7-301 322  
Fax: +372-7-304 310  
martin.lepiku@mail.ee

## Finland

Agilent Technologies Finland Oy  
Phone: 01080 2220  
Fax: 010 855 2667

Tamro MedLab Oy  
Phone: 0204 45 4975, 0204 45 4761

## France

Agilent Technologies  
Groupe Analyse Chimique  
N° AZUR : 0810 446 446  
Fax : 0825 010 708  
csc-france\_analyse-chimique@agilent.com

Bios Analytique  
Phone: 05 62 89 30 00

Bios Analytique - Agence  
Régionale  
Phone: 01 69 31 75 85

Chromoptic  
Phone: 03 86 41 54 51  
chromoptic@wanadoo.fr

Interchim  
Phone: 04 70 03 73 09  
interchrom@interchim.com

Interchim – Agence régionale  
Paris  
Nord-Normandie  
Phone: 01 41 32 34 40  
interchrom@interchim.com

LPCR  
Phone: 03 88 62 50 00

MERK EUROLAB  
Phone: 01 43 94 54 00

## Germany

Agilent Technologies  
Deutschland GmbH  
Chemische Analysentechnik  
Phone: 0800-603 1000  
Fax: 07243-602602  
analytik\_germany@agilent.com  
www.agilent.de

A-Z Analytik-Zubehör GmbH  
Phone: (06103) 921038  
E-Mail: AZ-Analytik@Freenet.de

Duratec Analysentechnik GmbH  
Phone: (06205) 9450-0  
info@duratec.de  
www.duratec.de

GGA Glaswaren, Geräte und  
Analysentechnik GmbH  
Phone: (02841) 9871-300  
gga@gga.de  
www.gga.de

Omnilab-Laborzentrum GmbH  
+Co. KG  
Abt. OCS  
Phone: (0421) 17599-351  
info@omnilab.de  
www.omnilab.de

Promochem GmbH  
Phone: (0281) 9887-0  
de@promochem.com  
www.promochem.com

Wagner & Munz GmbH  
Phone: (089) 451023-0/-18  
office@wagnermunz.com  
www.wagnermunz.com

WiCom GmbH  
Phone: (06252) 910 800  
info@wicom.de  
www.wicom.de

Greece/ Cyprus  
HELLAMCO/ M. Kontogiannis  
Phone: +30-1-689 52 60  
hellamco@compulink.gr

## Hungary

KROMAT Kft.  
Phone: +36 1 463-0770  
peter.keresztes@kromat.hu

## Ireland

Agilent Technologies Ireland Ltd.  
Phone: 01 605 8324  
Fax: 01 605 8323  
cag\_enquiry@agilent.com

Carl Stuart Ltd.  
Phone: 01 452 3432  
agilent@carlstuart.com

## Israel

Eldan Electronic Instruments Ltd.  
Phone: +972-3-902 1330  
eldan@eldan-el.co.il  
www.eldan-el.co.il

## Italy

Agilent Technologies Italia S.p.A.  
Centro Direzionale Villa Fiorita  
Phone: 800 012575  
(numero verde)  
analitica\_italia@agilent.com

Analitica S.a.s.  
Phone: 0039 080 3431366  
angelillo@analiticaweb.it

C.P.S. Analitica S.r.l.  
Phone: 0039 02 89505098  
cps@cps.it

D.T.O. Servizi S.r.l.  
Phone: 0039 041 997234  
dtoscien@tin.it

Stepbio S.r.l.  
Phone: 0039 051 634 3340  
stepbio@tin.it

Tecnolab S.n.c.  
Phone: 0039 095 912664  
tecnolab@videobank.it

## Kazakhstan

Computer Service Ltd  
Phone: +7 3272 582020  
computer\_service@cs.kz

## Kuwait

Technoline sarl  
Phone: +961 1 513 445  
technoline@lynx.net.lb

## Lithuania

Chrompikas  
Phone: +370-2-332 934  
chrompikas@lithill.lt

## Macedonia, Montenegro

Altris d.o.o.  
Phone: +389-70 230  
229altris@mol.com.mk

## Mauritius, Reunion, Seychelles, Madagascar

DUCRAY LENOIR Ltd  
Phone: +230-202 77 00  
duclen@bow.intnet.mu

## Moldavia

Laco-Alphatec s.r.l.  
Phone: +373-2-24 26 14  
laco@cni.md

## Morocco

SÓBOBAT SA  
Phone: +212-2-23 01 85  
sobobat@marocnet.net.ma

## The Netherlands

Agilent Technologies  
Netherlands B.V.  
Phone: 020 547 2600  
Fax: 020 547 2690  
chem\_benelux@agilent.com

Atas Benelux B.V.  
Phone: 079 343 3931  
benelux@atas.nl

Boom B.V.  
Phone: 0522 268 700  
boombv@boomlab.nl

Merck Eurolab B.V.  
Phone: 020 4808 400  
office@merckeurolab.nl

Bester B.V.  
Phone: 020 6400046

## Norway

Agilent Technologies Norway AS  
Phone: 815 32 560  
Fax: 2325 3710  
kjemisk\_analyse@agilent.com  
www.agilent.com/chem

## Poland

Agilent Technologies Polska  
Phone: +48 22 549 1400  
Fax: +48 22 549 1401  
klient@agilent.com

Anchem S.C.  
Phone: +48 22 606 3977  
info@anchem.pl

## S. Witko

Phone: +48 42 676 3435  
info@witko.com.pl

## Portugal

Soquímica  
Phone: 351 21 7165160  
soquimica@mail.telepac.pt

## Qatar

Qatar Datamation Systems  
Phone: +974-443 99 00  
qds@qatar.net.qa

Technoline sarl  
Lebanon  
Phone: +0961 1 513 445  
technoline@lynx.net.lb

## Romania

S.C. High-Res S.R.L.  
Phone: +40-32-216-441  
hires@mail.dntis.ro

## Russia

Interlab  
Phone: +7-095-973 2033-35  
InterLab@apg.ru  
www.apg.ru

## Saudi Arabia

ALFAISALIAH  
Phone: +966-1-462 42 66  
ssaadi@alfaisaliah.com

## Slovenia

CHEMASS d.o.o.  
Phone: +386-1-427 7560  
miran.zalec@chemass.si  
www.chemass.si

## SPES d.o.o.

Phone: +386-1-511 31 70  
danilo@spes.si

## Slovak Republic

Hermes Plus Slovakia s.r.o.  
Phone: +421-7-64364 051  
hermes.plus@hermes-plus.sk

## Slovenia

CHEMASS d.o.o.  
Phone: 386-1-427 7560

## Spes d.o.o.

Phone: +386-1-511 31 70  
danilo@spes.si

**SOUTH AFRICA, Botswana, Lesotho, Namibia, Swaziland, Angola, Malawi, Mozambique, Zambia, Zimbabwe**  
Chemetrix (PTY) Ltd.  
Phone: +27-11-541-9801

## Spain

Agilent Technologies Spain, S.L.  
Grupo de Análisis Químico  
Phone: 901 11 68 90  
Fax: 34 916 376 505  
cag\_instalaciones@agilent.com

Andaluz de Instrumentación, S.L.  
Polígono PISA  
andaluz@andaluz.com  
Sevilla Phone: 34 955 600 117  
Madrid Phone: 34 913 656 481  
Murcia Phone: 34 968 809 162  
Valencia Phone: 34 961 329 033  
Pontevedra Phone: 34 986 838 110

Anorsa  
Phone: 34 933 006 050  
anorsa@intercom.es

Proquinorte, S.A.  
Phone: 34 944 423 350  
proquinorte@clientes.euskaltel.es

Serviquímica, S.A.  
socarsa@mhp.es  
Barcelona Phone: 34 933 003 493  
Tarragona Phone: 34 977 773 552  
Castellón Phone: 34 964 255 946

## Sweden

Agilent Technologies  
Sweden AB  
Phone: 08 506 489 50  
Fax: 08 506 489 51

ChromTech AB  
Phone: 08 464 80 20  
info@chromtech-ab.se

Scantec Lab AB  
Phone: 031-336 9000  
Info@scanteclab.se

## Switzerland

Agilent Technologies  
(Schweiz AG)  
Chemische Analysentechnik  
Phone: 0848 803 560  
Fax: 01 735 97 44  
cag\_qualify@agilent.com  
www.agilent.ch

BGB Analytik AG  
Phone: 061 991 00 46  
sales @bgb-analytik.ch  
www.bgb-analytik.ch

Infochroma AG  
Phone: 041 740 18 28  
infochroma@swissonline.ch  
www.infochroma.ch

Milian SA  
Phone: 022 884 16 88  
milian@milian.ch  
www.milian.ch

MSP Friedli & Co  
Phone: 031 972 31 52  
j-w@mssp.ch  
www.mssp.ch

## Tunisia

PRECISION ELECTRONIQUE  
Phone: +216-1-807 555  
pe.analytique@tunelec.com.tn

## Turkey

SEM LABORATUAR  
Phone: +90-216-340 01 09  
serdar@semilab.com.tr

## Ukraine

Alsi Ltd.  
Phone: +38 044 276 75 05  
andrey\_esaulenko@alsi.kiev.ua

## United Arab Emirates

EMITAC  
Phone: +971 4 282 75 77

Technoline sarl, Lebanon  
Phone: +0961 1 513 445  
technoline@lynx.net.lb

## United Kingdom

Agilent Technologies UK Limited  
Phone: 0845 712 5292  
Fax: 0161 492 7171  
cag\_enquiry@agilent.com

Crawford Scientific Limited  
Phone: 01357 522961  
crawford.sci@dial.pipex.com

Esslab Limited  
Phone: 01702 555577  
sales@esslab.com

Hichrom Limited  
Phone: 0118 930 3660  
sales@hichrom.co.uk

Metlab Supplies Limited  
Phone: 01244 526300  
sales@metlabsupplies.co.uk

## Uzbekistan

TEXLAB  
Phone: +998 71 144 30 10  
rustam@texlab.com.uz

## Yemen

IMTAC YEMEN Ltd.  
Phone: +967-1-268-554  
imtacyement@y.net.ye

## Yugoslavia

DSP  
Phone: +381 11 311 90 81  
darko@dsp-c.co.yu  
www.dsp-c.co.yu

Information, descriptions and specifications in this publication are subject to change without notice.

Copyright © 2001 Agilent Technologies  
Printed in Germany  
Publication Number 5988-4750ENE

Microsoft® is a U.S. registered trademark of Microsoft Corporation.  
Windows® and MS Windows® U.S. registered trademark of Microsoft Corporation.

The Agilent 2100 Bioanalyzer products and Agilent printed microarray solutions are ONLY available in selected countries. Please contact Agilent Technologies directly with your enquiries.



**Agilent Technologies**

# Agilent Technologies Instruments & Accessories Overview



Agilent Technologies

Agilent Technologies is a leading provider of life sciences and analytical instrument systems to scientists in life sciences, pharmaceutical, environmental and chemical industries, worldwide. The company offers scientists the range of instruments, systems and services needed for success in acquiring and interpreting genetic and chemical information – from sample handling, to analysis to data management and reporting. We are committed to providing superior standards-based technology, designed for maximum productivity, cost effectiveness and ease in complying with regulatory requirements

### Answers to Technical Questions

With years of experience, our inside sales reps and sales support engineers can assist you with technical support, configuration, and compatibility questions. Get advice, recommendations, and guidance from our friendly team of experts.

### Product Literature . . . Fast

You can download the latest information on Agilent instruments and accessories directly from our web site. Or, just call and ask us and we'll mail or fax the latest information on Agilent products to you right away.



All product, brand, or company names are registered trademarks of their respected holders.

Gas Chromatography	3-13
Agilent GC Family of Products	3
6890N GC	4
Inlets	5
Detectors	6-7
6850 GC	8
Micro GC	9
Sample Introduction and Preparation	10-12
GC Automatic Liquid Samplers	10
6850 Automatic Liquid Samplers	11
ALS Consumables	11
Headspace Samplers	12
Purge and Trap Concentrator	12
GC Consumables and Accessories	13
Mass Spectrometry	14-18
5973 Network Mass Selective Detector	14-15
GC/MSD Consumables and Accessories	16
7500 Benchtop ICP-MS	17-18
Liquid Chromatography	19-29
Agilent LC Family of Products	19
1100 Series LC/MSD and LC/MSD Trap	20-22
LC and LC/MSD Solutions	23
1100 Series LC	24
1100 Series Pumping Systems and Data Handling	25
1100 Series Injection Systems	26
1100 Series Detectors	27
1100 Series Purification System	28
LC Consumables and Accessories	29
Bioanalyzer	30-31
2100 Bioanalyzer	30
Bioanalyzer Kits and Accessories	31
Microarray Scanner	32
Catalog Microarrays	32
UV-Visible Spectroscopy	33-36
8453 UV-Visible Spectrophotometer	33
8453 Systems	34
8453 Software	35
8453E, Economical UV-VIS	36
Capillary Electrophoresis	37
Data Handling	38-40
Networked Data Systems	38-39
Multi-Technique ChemStation	39
Data Handling	40
Support Services	41
Support Services	41
Training	41

## Agilent's flagship GC

At the forefront of Agilent chemical analysis solutions is the 6890N network gas chromatograph. Let us assess your needs and design a solution to help you achieve better results. We will include instrumentation, accessories, supplier services and any additional components required.



### Performance

- Unsurpassed reproducibility – full electronic pneumatic control (EPC).
- Reproducible methods with retention time locking (RTL) software – same results, every location, every time!

### Productivity

- Fast, easy method set-up.
- Fast oven warm-up and cool-down.
- Decreased calibration time.

### Regulatory Compliance

- ISO 9001
- Declaration of Conformity
- Declaration of System Validation

### Flexibility

- Modularity to meet changing needs – quickly change or upgrade GC configurations.
- LAN communication to PC.
- Six heated zones (Inlet, detector, auxiliary)

DESCRIPTION	PRODUCT NO.
6890N Gas Chromatograph Mainframe	G1530N
Product Installation	G1530N #44K
Familiarization at Installation	G1530N #44L
Installation Qualification	G1530N #44U
Operational Qualification/Performance Verification	G1530N #44V
6890N Series Gas Chromatograph For custom configurations.	G1540N
6890N GC for 5973 MSD	G1942N
6890N GC and 7683 Injector for MSD	G1943N

## Select an Inlet

### Introduction systems for liquid and gas samples

A broad range of inlets lets the Agilent 6890N GC system meet a wide range of requirements

#### Split/Splitless

For 0.32, 0.25, 0.20 and 0.10 mm capillary columns and 0.53 mm megabore columns.

#### Packed

For glass and metal 1/4 and 1/8 inch packed columns and 0.53 mm megabore capillary columns.

#### Cool-on-column

Temperature programmable cool-on-column for direct liquid injection minimizes discrimination during injection and separates low boiling point constituents selectively.

#### Valves

The reproducible way to introduce gaseous samples to the 6890N. Call for details.

### Programmable Temperature Vaporizing (PTV)

Perform large volume injections for lower minimum detection limits and less thermal degradation of labile compounds.

### Volatiles Interface

Provides trace level detection of pre-vaporized samples.

All inlets listed come standard with electronic pneumatic control (EPC) for greater stability, reproducibility and improved performance. Included are digital control of flow and pressure.

DESCRIPTION	PRODUCT NO.	6890N OPTION NO.
Split/Splitless 100 psi capillary injection port	G1552A	G1530N #112
Split/Splitless 150 psi capillary injection port	G1560A	G1530N #113
Packed column injection port	G1551A	G1530N #102
Cool-on-column capillary injection port	G1554A	G1530N #122
PTV inlet with septumless head, for use with liquid CO <sub>2</sub>	G2617A	G1530N #130
PTV inlet with septum head, for use with liquid CO <sub>2</sub>	G2618A	G1530N #131
PTV inlet with septumless head, for use with liquid N <sub>2</sub>	G2619A	G1530N #132
PTV inlet with septum head, for use with liquid N <sub>2</sub>	G2620A	G1530N #133
Volatiles interface	G2319A	G1530N #142

## Select a detector

### A comprehensive selection of Agilent detectors

#### Flame Ionization Detector (FID)

- Maximum sensitivity and versatility.
- Optimized for capillary and packed chromatography.

#### Thermal Conductivity Detector (TCD)

- Single-filament, single-column design.
- Full digital dynamic range with optimum sensitivity for both packed and capillary column chromatography.

#### Micro Electron Capture Detector (ECD)

- Micro ECD for better linearity, sensitivity and reduced susceptibility to contamination.
- Reduced degradation of sensitive compounds

#### Nitrogen Phosphorous Detector (NPD)

- Ceramic bead for better stability lifetime.
- Optimized selectivity and sensitivity for nitrogen and phosphorus containing compounds.

#### Flame Photometric Detector (FPD)

- Selective for sulfur or phosphorus containing compounds.
- Dual wavelength design allows simultaneous detection of S and P in the same run.

All detectors come standard with EPC for precise digital control of carrier and make-up gases for accuracy and reduced gas consumption.

DESCRIPTION	PRODUCT NO.	6890N OPTION NO.
<i>Flame Ionization Detector For packed and capillary use</i>	G1561A	G1530N #210
<i>Flame Ionization Detector Capillary optimized</i>	G1562A	G1530N #211
<i>Thermal Conductivity Detector</i>	G1563A	G1530N #220
<i>Micro Electron Capture Detector</i>	G2397A	G1530N #231
<i>Flame Photometric Detector</i>	G2333A	G1530N #240
<i>Dual Wavelength FPD</i>	G2334A	G1530N #241
<i>Nitrogen Phosphorus Detector For packed and capillary use</i>	G1575A	G1530N #250
<i>Nitrogen Phosphorus Detector Capillary optimized</i>	G1576A	G1530N #251

## 5973N Mass Selective Detector

### Easily perform routine qualitative and quantitative analyses in complex matrices

The 5973 Network Mass Selective Detector for the 6890N GC is an easy-to-use, highly reliable detector that can positively identify and quantitate compounds in complex matrices. It provides:

- Classical EI and CI Spectra for legal defensibility.
- Unsurpassed sensitivity – picogram levels in full scan electron ionization and positive chemical ionization modes; femtogram levels in selected ion monitoring mode.
- Fast scan speed and a linear response over four orders of magnitude.
- Ease of use and low maintenance.
- Flexible instrument control and data communication.



See pages 8-10 for a more detailed product description.



## GC Automatic Liquid Sampler

### Add automatic liquid injection to your GC

Agilent can help you meet demands for increased throughput via unattended operation of your Agilent GC.

#### 7683 ALS for the 6890N

- The fastest injection speed in the industry – five times faster than any other ALS on the market.
- Eliminates needle discrimination.
- A choice of normal, on-column or multiple injections.
- Variable pre- and post-injection dwell times.
- Introduction of sample volumes from 0.1 µL to 50 µL or more (with multiple injections).
- Variable sampling depths for ambient headspace or micro liquid-liquid extraction.
- Two wash solvents for pre- and post-injection needle rinsing, virtually eliminating sample carryover.
- A 100-sample tray for the 6890N that mounts away from the GC oven to prevent sample degradation or condensation.
- The capability to use external standards, simplifying quantitation.
- Simultaneous, dual-injection capability.
- A modular design, with options for increased automation.
- Fast and easy transfer of sampler modules from one GC to another.
- Easy inlet maintenance and fast, inexpensive repair if necessary.
- Optional bar code reader.



Integrated 7683 ALS for your 6890N and 6890 Plus GCs.

DESCRIPTION **	PRODUCT NO.
7683 Autoinjector module (3 and 8 sample turrets)	G2613A
7683 Autosampler tray module Includes a pack of 100 2-mL screw-cap vials.	G2614A
7683/6890 ALS interface board	G2612A
DESCRIPTION **	PRODUCT NO.
Individual Modules*	
7673 Autoinjector tower module	G1513A
7673 Autosampler tray module 100 position sample tray	18596C
7673 Controller module Compatible with all versions of 7673 injectors and trays.	G1512A
8 sample turret for use with G1513A autoinjector	G2306A

\*Additional hardware and/or cables depend on your existing configuration.

\*\*Compatible with 6890s (Serial # >US00020000).

Trade in your old 7673 autoinjector, 100 position robotic tray, and/or controller to upgrade to the latest features.

## 6850 Series GC System

**Ideal combination of high performance, small size and ease of use**

### High performance

- Meets EN 50082-2 Heavy Industrial Environment standards.
- Split/splitless or packed inlet
- FID, TCD, or MSD. Autosampler – 8 or 27 samples.
- Gas or liquid sampling valve.



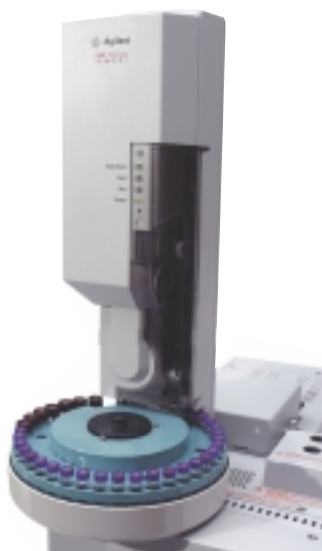
DESCRIPTION	PRODUCT NO.
6850 Series Gas Chromatograph* Includes 6-button front panel with 2-line display, built-in interface for the 7683 autoinjector, RS-232, analog out. Inlet operating pressure 0-100 psi.	G2630A
Capillary S/SL Inlet and FID with EPC Capillary split/splitless inlet (0-100 psi) and flame ionization detector, both w/EPC.	G2630A #611
or Packed Inlet/FID	G2630A #621
Capillary S/SL Inlet and TCD, with EPC Capillary split/splitless inlet (0-100 psi) and thermal conductivity detector, both w/EPC.	G2630A #612
or Packed Inlet/TCD	G2630A #622
LAN Communications Interface Provides capability to connect to a host computer over LAN. Includes ThinLan (coax) and 10BaseT (twisted pair) cable.	G2630A #500
Additional GC License for 6850 GC Provides a license for a 6850 GC to operate with an existing multitechnique ChemStation.	G2630A #530
6850 Hand-held controller Provides method programming/editing and other functions. Detachable controller can be used with multiple 6850 GCs. RS-232 communications and cable included.	G2629A

\*Gas or Liquid Sampling Valves

## 6850 Automatic Liquid Sampler

**Unattended operation for increased sample throughput**

- Up to 27 2-ml vials or up to 22 4-ml vials
- Access to smaller samples through variable sampling depth
- Modular



DESCRIPTION	PRODUCT NO.
6850 Automatic Liquid Sampler Can hold up to 27 2-ml vials or 22 4-ml vials using the optional turret accessory (G2880-64010).	G2880A
7683 Autoinjector module 3 and 8 sample turret	G2613A

DESCRIPTION	PRODUCT NO.
Screw top vials and caps	5182-0557
Non-assembled, 500 vial convenience pack, clear vials, blue screw caps, PTFE/red rubber septa	5182-0867
Crimp top vials 500 vial convenience pack, clear crimp vials, silver caps, PTFE/red rubber septa	5181-3400
Snap top vials and caps 500 vial convenience pack, clear snap vials, polymer caps, PTFE/red rubber septa	5182-0547
Vial inserts 100 µl, mandrel point inserts with polymer feet, 100/pk	5181-1270
250 µl, flat bottom glass inserts, 500/pk	5181-3377
Micro vials Micro-V micro sampling vials, crimp top, 100/pk	5184-3551
Crimping and Decapping Supplies Electronic Crimper for 2 mL vials w/ battery and charger	5183-4763
Electronic Decapper for 2 mL vials w/ battery and charger	5184-3567
Crimp holder without crimp head	5062-2495
Crimp head for 12 mm caps	5001-3755
Decapper head for 12 mm caps	5001-3758
Syringes Syringe, 10 µl tapered, FN 23-26s/42/HP, 6/pk	5181-3360
Syringe, 10 µl straight, FN 23s/42/HP, 6/pk	9301-0725
Syringe, 10 µl tapered, FN, Gastight, 23-26s/42/HP, 6/pk	5181-3361
Syringe, 5 µl tapered, FN 23-26s/42/HP, 6/pk	5181-8810
Syringe, 5 µl straight needle, FN 23s/42/HP, 6/pk	5181-8810
Syringe, 5 µl straight, FN 23/42/HP	9301-0892

# Micro Gas Chromatographs

## Fast, accurate measurements when and where you need them

Agilent Micro Gas Chromatographs are dependable, fast, accurate, easy-to-use systems. They are designed to measure gas compositions and can handle a wide range of applications.

### Popular applications

- Natural gas
- Fuel cell
- Oil and gas exploration
- Chemical manufacturing
- Heating and cooling
- Refining
- Landfill gases
- Specialty chemicals
- Mine safety
- General purpose fixed gas

### Fast Analysis

- Immediate results.
- Reduce your analyses times from hours . . . to seconds.

### Reliable

- Injector valves have been proven reliable to over 2.5 million analyses.

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



### Small Size

- Single channel unit – 6" x 10" x 4" and 12 lbs.
- Modular – can be configured with 1 to 4 channels.
- Portable for field analysis.

### 3000 Micro GC

This model exhibits superior performance, even under adverse conditions. It features an extended detector dynamic range, allowing simultaneous analysis of major and minor components.

### 3000 NGA Micro GC

Designed for reliability and trouble-free service, the 3000 NGA is supplied complete with instrument, application specific software and calibration gases for natural gas analysis.

### 2000 Micro GC

Unheated models analyze gases at ambient temperature with boiling points up to 150°C; heated models analyze heated samples (to 110°C) with boiling points up to 220°C. Available in P Series, Quad Series and Refinery Gas Analyzers (RGA).

DESCRIPTION	PRODUCT NO.
3000 Micro GC. Single-channel (optional 2nd channel is available) Heated gas chromatograph with thermal conductivity detector (TCD). Also includes installation and familiarization.	G2801A
Add second channel including TCD	G2801A #002
Cerity Networked Data System Provides control and data acquisition for one 3000 micro GC and standard chromatographic calculations and reporting.	G2801A # 601
3000 Natural Gas Analyzer Two-channel micro GC system designed to analyze thermal content of natural gas streams and report analytical results in accordance with GPA, ASTM, and ISO calculation standards. Analyzer includes instrument, software, natural gas calibration kit, installation and familiarization.	G2803A
One or two channel Micro GC	G2890A
Three or four channel Micro GC	G2891A





## 7694 Headspace Sampler

### Looking for volatile analytes? Headspace sampling can simplify your work

Eliminate sample preparation with the Agilent 7694 Headspace Sampler by introducing volatile components automatically – from virtually any sample matrix – directly into a gas chromatograph (GC). A low-volume, highly inert, heated volatiles interface is optimized for headspace-GC analysis, preventing sample loss or degradation and reducing carryover.



DESCRIPTION	PRODUCT NO.
7694A Headspace sampler without EPC (44 samples)	G1290B
EPC Headspace interface kit to a 6890 EPC inlet	G1940A
7694A Headspace sampler software (Windows compatible)	G2401AA
7964E Economy headspace sampler (12 samples)	G1883A
Support table for headspace above MSD	G1287A

## Purge and Trap Concentrator

### Purchase the Tekmar 3100 directly from Agilent Technologies

- Inert sample pathway.
- Temperature uniformity.
- Improved sample drain system.
- Efficient trap bake cycle.
- Choice of automatic samplers for unattended sequential analysis.

#### Keypad or PC control

- Directly enter operating setpoints via removeable keypad or via PC with Purge and Trap control software.

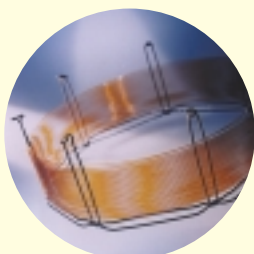
DESCRIPTION	PRODUCT NO.
Tekmar® 3100 Purge and Trap	TMR-3100
TekLink® PC Control Software	TMR-3100 #005
Tekmar® 3100 upgrade to whole Silcosteel®	TMR-3100 #100
Tekmar® 3100 upgrade to CO <sub>2</sub> TURBOCool™	TMR-3100 #200
Tekmar® 3100 upgrade to CO <sub>2</sub> TURBOCool™ whole Silcosteel	TMR-3100 #300
Tekmar® 2016 Purge and Trap Autosampler Capability for 16 3/4" mount discrete samplers.	TMR-2016
5 ml frit sparger	TMR-2016 #020
5 ml fritless sparger	TMR-2016 #021
25 ml frit sparger	TMR-2016 #030
25 ml fritless sparger	TMR-2016 #031
Disposable spargers	TMR-2016 #010
Tekmar AQUATek® 70 ALS Includes TekLink® PC Control Software.	TMR-AQUA70
Cryofocusing Module for Purge and Trap	TMR-6520

\* Silcosteel® is a registered product of Restek Corporation.

Tekmar®, TekLink™, TURBOCool™, AQUATek™ are registered products of Tekmar-Dohrmann Company.

## GC Consumables and Accessories

For more information on our entire portfolio of J&W and Agilent GC columns and other gas chromatography supplies, visit our web site at [www.agilent.com/chem](http://www.agilent.com/chem)



### DESCRIPTION

### PRODUCT NO.

Column Nut (2/pk)	5181-8830
Ferrules and Septa	
0.5 mm id graphite ferrules (10/pk) (100, 200, 250, and 320 µm)	5080-8853
1.0 mm id graphite ferrules (530 µm) (10/pk)	5080-8773
Septa, 11 mm high-temperature, BTO (50/pk)	5183-4757
Septa, 11 mm advanced Green (50/pk)	5183-4759
Septa, 11-mm long life (50/pk)	5183-4761
Septa, 11-mm, general purpose(24/pk)	5181-1263
Split/Splitless Inlet Supplies 6890	
Split/Splitless liner, 4 mm id, 900-µl (w/glass wool)	19251-60540
Single taper liner, 4 mm id, 900-µl, (deactivated)	5181-3316
Single taper liner, 4 mm id, 900-µl, deactivated, glass wool	5062-3587
Double taper splitless liner (deactivated)	5181-3315
Graphite O-rings for split applications (10/pk)	5180-4168
Graphite O-rings for splitless applications (10/pk)	5180-4173
Viton O-rings, for all liner applications (12/pk)	5180-4182
Gold-plated seal	18740-20885
Tools and Gas Management Supplies	
Installation kit with ferrules, nuts, copper tubing, and oxygen, moisture and hydrocarbon traps.	19199M
Electronic Leak Detector	5182-9646
Two stage regulator, brass, 125psig max for He/Ar/Ni	5183-4644
ADM 1000 Volumetric Flowmeter	220-1170
Oxygen Moisture Trap	OT3-2
Hydrocarbon "S" Trap, activated charcoal	5060-9096
Moisture "S" Trap, preconditioned	5060-9084
FID Supplies for 6890	
Ignitor glow plug assembly	19231-60680
FID collector assembly	G1531-60690
Jet, capillary dedicated (0.29 mm id tip)	G1531-80560
Jet, adaptable capillary (0.29 mm id tip)	19244-80560
Jet, adaptable packed (0.46 mm id tip)	18710-20119
NPD Supplies for 6890	
NPD bead assembly	G1534-60570
NPD jet, capillary optimized (0.29 mm)	G1531-80560
NPD jet, capillary adaptable (0.29 mm)	19244-80560
FID/NPD Adapters for 6890	
Capillary FID/NPD adapter	19244-80610
1/4 inch vespel ferrule (10/pk)	5080-8774
1.0 mm graphite ferrule (10/pk)	5080-8773
0.5 mm graphite ferrule (10/pk)	5080-8853
1/4 inch brass tubing nut (10/pk)	5180-4104
TCD Supplies for 6890	
TCD capillary column adapter seal and nut	G1532-80540
ECD Supplies for 6890	
ECD wipe test kit	18713-60050

## 5973 Mass Selective Detector

### The world's best benchtop MSD keeps getting better

Agilent's 5973 Network Mass Selective Detector makes it easier than ever to perform routine qualitative and quantitative analyses – even with complex sample matrices.

#### Sensitivity

- EI-SCAN mode, 1 pg of octafluoronaphthalene (OFN) with a signal to noise ratio (s/n) of 10:1.
- EI-SIM mode, 20 fg OFN, 10:1 s/n.
- NCI-SCAN mode, 1 fg OFN, 10:1 s/n.



#### Classical EI and CI spectra

- Legally defensible data.
- Identify total unknowns.
- Identify molecular weight using adduct ions.

#### Low maintenance

- High Energy Dynode extends multiplier life by two to three times.
- Independently heated interface, ion source and quadrupole increases the time between source cleanings.

#### Performance

- Mass range from 1.6 to 800 amu for expanded compound identification.
- Scan speed to 5200 amu/sec for better precision and narrow peak analysis and linear response over four orders of magnitude.
- Variable electron energy voltage to enhance molecular ions and increase sensitivity.

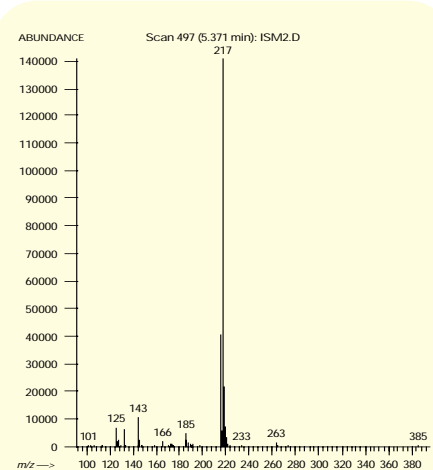
#### Choice of pump systems

- 95 L/sec diffusion pump.
- 70 L/sec standard performance turbomolecular pump for EI and PCI work.

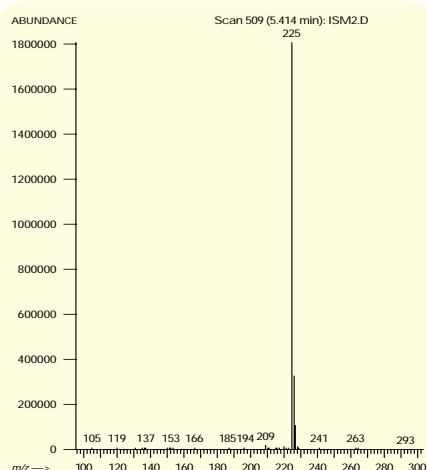
- 255 L/sec high performance turbomolecular pump allows use of larger ID columns for increased sample capacity and better linearity as well as shorter pump-down time for EI, PCI and NCI work.

#### MSD ChemStation for ease of use

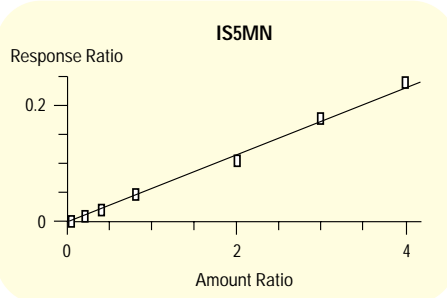
- Complete instrument control and data acquisition.
- Retention Time Locking (RTL) software.
- Library databases including NIST 98, Wiley, RTL pesticide library and Pfleger drug library.



Electron capture negative ion chemical ionization mass spectrum of the trimethyl-silyl derivative of isosorbide-5-mononitrate from 100 to 400 amu using ammonia buffer gas.



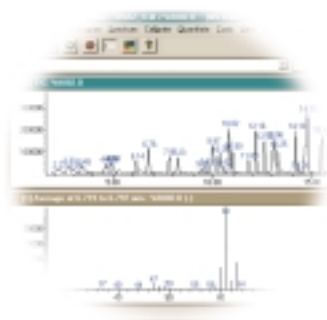
Electron capture negative ion chemical ionization mass spectrum of the trimethyl-silyl derivative of p-nitrobenzyl alcohol internal standard from 100 to 400 amu using ammonia buffer gas.



Calibration curve for IS5MN from 10 ng/ml to 1000 ng/ml,  $r^2 = 0.996$ .

## 5973 Mass Selective Detector

For more information on Agilent Technologies' Mass Selective Detector and relative applications, visit our web site at [www.agilent.com/chem](http://www.agilent.com/chem)



DESCRIPTION	PRODUCT NO.
<i>5973N MSD Performance Turbo Pump PCI/NCI System Includes MSD, ChemStation, GC/MSD software, PC, printer, and ion gauge controller. For use with 6890N GC.</i>	G1789A
<i>5973N MSD Standard Turbo Pump PCI System Includes MSD, ChemStation, GC/MSD software, PC, printer, and ion gauge controller. For use with 6890N GC.</i>	G1788A
<i>5973N MSD Performance Turbo Pump EI System Includes MSD, ChemStation, GC/MSD software, PC and printer. For use with 6890N GC.</i>	G1779A
<i>5973N MSD Standard Turbo EI System Includes MSD, ChemStation, GC/MSD software, and PC, printer. For use with 6890N GC.</i>	G1778A
<i>5973 MSD-Diffusion EI System Includes MSD, ChemStation, GC/MSD software, PC and printer.</i>	G1777A
<i>GC/MS System Includes 6850GC, 5973N MSD Diff-Pump EI Mainframe, standard ChemStation Bundle. Not included: 59864B ion controller.</i>	G2570A
<i>Ion Gauge Controller</i>	59864B
<i>PCI/NCI Upgrade for 5973N MSD Upgrades all turbo-pump equipped 5973N MSD with Chemical ionization.</i>	G1086A
<i>6890N GC for 5973N MSD Includes 100 psi split/splitless inlet and interface to 5973N MSD.</i>	G1942N
<i>6890N GC and 7683 Injector for 5973N MSD Includes 100 psi split/splitless inlet and interface to 5973N MSD and one automated liquid injector with 8 position sample tray.</i>	G1943N
<i>7683 Automatic Liquid Sampler Tray Includes 100 position sample tray.</i>	G2614A
<i>MSD Data Analysis Software Includes 5 user configurable modes: standard, enhanced, environmental, petrochemical, and drug analysis.</i>	G1710CA

### Mass Spectral libraries for MS ChemStations

<i>NIST 98 MS Library Bundle CD-ROM Includes 130K spectra, 107K structures (Agilent &amp; NIST formats) and NIST MS Search and Deconvolution Programs. Requires 120MB.</i>	G1033A
<i>NIST 98 Chemical Structures Database CD-ROM Includes 107K chemical structures.</i>	G1036A
<i>Wiley 7th Edition MS Spectral Library CD-ROM Includes 390,000 EI spectra and 621,660 chemical names. Chemical Abstract numbers exist for 252,966 entries.</i>	G1035B
<i>MS Pesticide Library CD-ROM Includes 300 compounds in PBM format. Requires 1MB of free disk space and CD-ROM.</i>	G1038A
<i>Pfleger 3rd Edition MS Drug Library CD-ROM Includes 6,300 EI drug and drug metabolite spectra. Requires 4.5MB of free disk space and CD-ROM.</i>	G1039C
<i>RTL Pesticide MS Library Includes 550 compounds and RTL method. For use with MSD ChemStation Software revision B.01.00 or later.</i>	G1049A
<i>Wiley 7N Edition MS Library Upgrade Includes 390K spectra, PBM &amp; NIST formats. Requires registration number or previous copy, NT and CDC ROM.</i>	G1730A
<i>NIST 98 MS Library Bundle Upgrade</i>	G1041A
<i>NIST Mass Spectral Search Program</i>	G1043A
<i>NIST Spectral Library Only</i>	G1044A

## MSD Consumables and Accessories

For more information on MSD Consumables and Accessories, visit our web site at [www.agilent.com/chem](http://www.agilent.com/chem)



DESCRIPTION	PRODUCT NO.
<b>Ion Gauge Controller</b> <i>For use with 5973N MSD</i>	59864B
Triode Gauge Tube	0960-0897
EI Source	G1099-60106
CI Source	G1999-65402
Filament assembly	05972-60053
K and M Electron Multiplier	05971-80102
K and M Electron Multiplier replacement horn	05971-80103

DESCRIPTION	PRODUCT NO.
<b>Maintenance Supplies</b>	
Nylon gloves, large	8650-0030
Abrasive paper, 3 µm 5/pk	5061-5896
Lintfree cloths, 15/pk	05980-60051
Cotton swabs 100/pk	5080-5400
Diffusion pump oil, Santovac 5P Ultra, 18.5ml	6040-0809
Foreline pump oil, Inland 45, 1 ltr	6040-0834
<b>Ion Source Supplies</b>	
EI Filament assembly (ceramic coiled filament with reflector assembly)	05972-6005
CI Filament assembly, 2/pk	G1099-80053
Lens insulator	05971-20130
Column nut, Ion source	05988-20066
<b>Repeller Assembly Supplies</b>	
Insulator	G1099-20133
<b>Miscellaneous Supplies</b>	
Electron multiplier horn	05971-80103
PFTBA (Perfluorotributylamine) sample, 10g	8500-0656
PFTBA Glass Bulb	05980-20018
MSD NoVent (prevents air/moisture from entering system during column change or inlet maintenance)	5183-4782
<b>Ferrules</b>	
GC/MSD interface ferrule, 0.4 mm id for 200/250 µm columns (10/pk)	5062-3508
Injection port ferrule, Vespel/Graphite, 250 µm id (10/pk)	5181-3323



## 7500 Series ICP-MS

### A range of systems to meet your needs

The 7500 Series comprises of four different models – 7500a, 7500i, 7500s and 7500c – to precisely meet your application requirements. And since the 7500s Series is modular, each model can be configured or upgraded with optional features as required.



DESCRIPTION	PRODUCT NO.
<b>Typical Samples:</b>	
Nickel Sample Cone. Screw threaded mount. Includes O-ring	G1820-65238
Nickel Skimmer Cone except 7500c. Screw threaded mount.	G1820-65050
Nickel Skimmer Cone for 7500c. Screw threaded mount.	G1833-65497
Pt Skimmer Cone except for 7500c. Screw threaded mount.	G1820-65237
Pt Skimmer Cone for 7500c. Screw threaded mount.	G1833-65092
Stainless Skimmer Base except for 7500c	G1833-65407
Stainless Skimmer Base for 7500c	G1833-65498
Brass Skimmer Base except for 7500c	G1833-65408
Brass Skimmer Base for 7500c	G1833-65505
Quartz Spray Chamber	G1820-65337
Quartz Torch	G1833-65423
Spray Chamber/Torch Connector	G1833-65426
Shield Torch System for 7500a or 7500i	G3142B
<b>Nebulizer</b>	
Concentric Nebulizer	G1820-65138
Microflow Nebulizer	G3139A
Endcap for Concentric & Microflow Nebulizer (with Viton O-ring)	G1833-65475
Babington Nebulizer	G1820-60453
Endcap for Babington Nebulizer (with Viton O-ring, Polypropylene)	G1833-65476
<b>7500a ICP-MS Mainframe</b>	G3151A
ICP-MS mainframe equipped with high solids nebulizer and Ni interface. Requires 7500 Series ChemStation.	
<b>7500i ICP-MS Mainframe</b>	G3152A
ICP-MS mainframe equipped with high solids nebulizer and Ni interface. Requires 7500 Series ChemStation.	
<b>7500c ICP-MS Mainframe</b>	G3155A
ICP-MS mainframe equipped with Babington nebulizer, Ni interface and Octopole Reaction System.	
<b>7500s ICP-MS Mainframe</b>	G3153A
ICP-MS mainframe equipped with high solids nebulizer and Ni interface. Requires 7500 Series ChemStation.	
<b>Integrated Sample Introduction System (ISIS)</b>	G3148A
For 7500a or 7500s. Expands the application range of the 7500 Series.	
<b>Integrated Autosampler</b>	G3160A
Rotary type autosampler with cover for ultratrace analysis.	
<b>Intelligent Sequence Software for 7500a</b>	G3143A
Adds Intelligent Sequencing software module.	
<b>T-Mode Interface for 7500a or 7500i</b>	G3147A
For low level Fe determination in drinking water samples.	
<b>7500 Series ChemStation</b>	G3150A
Includes ICP-MS operating software, PC, monitor and printer.	

For a complete list of replacement parts and supplies for the 7500 ICP-MS, refer to our web site at [www.agilent.com/chem](http://www.agilent.com/chem)

## The new standard for value and productivity

Agilent Technologies 1100 Series sets the industry standard for HPLC analysis. The combination of our long expertise in chemical analysis with leading computer technology expands networking technology into the laboratory.

## Industry-specific total solutions that save time and money

To help you run applications quickly and successfully, we offer everything needed for successful analysis results – from reliable hardware and software and long-lasting columns to industry-specific applications.

## Superior HPLC modules for best chromatography results

The Agilent 1100 Series keeps your productivity high and your operating costs low. With our chemical analysis instruments, you get high qualitative accuracy, excellent quantitative precision, unmatched ruggedness and reliability for maximum uptime and fast results.

## Automated data management for compliance with 21 CFR Part 11

- Consistent links between method, raw data and results ensure data integrity, security and traceability.
- Store raw and meta data automatically.
- Retrieve data of interest with an integrated query function.



### Pumps

- Isocratic pump designed for routine QA/QC applications.
- Binary gradient pump for rapid, reproducible gradients and highest performance especially at low flow rates.
- Quaternary pump provides the highest flexibility in solvent mixing for a wide range of research and routine applications.

The 1100 Series also includes pumps designed for specific applications:

- Capillary pump ideally suited for capillary LC applications, where sample volumes are limited and higher sensitivity is essential.
- Preparative pump is an isocratic high performance pump with two parallel pistons, perfect for scale-up work, for typical preparative HPLC and for purity checks

### Autosamplers

- Standard autosampler for reliability, safety and ease of use.
- Well-plate autosampler adds maximum flexibility and fast injection.
- Thermostatted micro autosampler and micro well-plate autosampler allow injection of sample volumes from nl to  $\mu$ l.

### Detectors

Available are UV-detectors including variable and multi-wavelength, mass selective detectors, as well as special detectors – refractive index and fluorescence.

### Saves time

This system is designed for quick start-up, automated validation, ease of use, fast chromatography and automated data transfer to save you time without demanding more space or resources.

## 1100 Series Modules

### Select a ➤ pumping system



1100 Series Isocratic Pump with active inlet valve



1100 Series Binary Pump with high pressure mixing



1100 Series Vacuum Degasser for reduced baseline noise



1100 Series Capillary Pump with active inlet valve



The ChemStation Plus controls and evaluates data from up to four LC/GC/CE systems. A graphical user interface and built-in on-line tutorial make instrument operation fast and easy to learn.

DESCRIPTION	PRODUCT NO.
<i>1100 Isocratic Pump Includes isocratic pump, solvent cabinet, solvent bottle and CAN cable.</i>	G1310A
<i>1100 Binary Pump Includes binary pump, solvent cabinet, 2 solvent bottles and CAN cable.</i>	G1312A
<i>Maintenance Kit for Binary Pump Includes parts required for standard maintenance.</i>	G1312A #010
<i>Continuous seal wash option for use with highly concentrated salt solution to extend seal lifetime</i>	G1312A #030
<i>Solvent Selection Option Includes solvent selection valve and 2 solvent bottles.</i>	G1312A #031
<i>1100 Quaternary Pump with Degasser Includes quaternary pump, solvent cabinet, 4 solvent bottles, vacuum degasser and CAN cable.</i>	G1354A
<i>Maintenance Kit for Quaternary Pump Includes parts required for standard maintenance.</i>	G1354A #010
<i>Continuous seal wash option for use with highly concentrated salt solutions to extend seal lifetime</i>	G1354A #030
<i>1100 Preparative Pump Includes preparative pump, solvent cabinet, 2 L solvent bottle, purge valve, 1-m CAN cable and seal wash with peristaltic pump.</i>	G1361A
<i>1100 Preparative Pump Gradient Extension Includes preparative pump, gradient kit, 2 L solvent bottle, purge valve, 0.5-m CAN cable and seal wash with peristaltic pump.</i>	G1391A
<i>1100 Capillary LC System Includes micro vacuum degasser, capillary pump, thermostatted micro ALS, thermostatted column compartment, diode array with 500 ml flow cell, LAN card and 3D ChemStation.</i>	G1388A

### Select a controlling and data-handling device

DESCRIPTION	PRODUCT NO.
<i>Single Instrument LC 2D ChemStation Includes PC, CD-ROM, monitor, software and printer.</i>	G1317A
<i>High Performance LC 2D Chemstation Includes PC, CD-ROM, monitor, software and printer.</i>	G1318B
<i>Single Instrument LC 3D ChemStation Includes PC, CD-ROM, monitor, software and printer.</i>	G1319A
<i>1100 Control Module For single point control of 1100 HPLC modules and on-line signal monitoring. Includes CAN-cable and slot for PCMCIA-card for method transfer.</i>	G1323B
<i>Purification/High Through Put SW Module Software for the purification system including fractionation based on time and UV signal.</i>	G2262A

## 1100 Series Modules

### Select a

#### ➤ manual or automated injection system



1100 Series Autosampler



1100 Series Well-Plate Sampler



220 Micro Plate Sampler



1100 Series Fraction Collector



1100 Series Vacuum Degasser or Micro Degasser for reduced baseline noise



1100 Series Thermostatted Column Compartment with two independent temperature zones

#### DESCRIPTION

#### PRODUCT NO.

<b>1100 Autosampler</b> Includes autosampler with 100 vial (2ml) tray, 40 vial (2ml) tray, 15 vial (6ml) tray and CAN cable. Injection volume range from 0.1 to 100 microliters.	<b>G1313A</b>
<b>1100 Thermostatted Autosampler</b> Includes cooled autosampler with 100 vial (2ml) tray, 40 vial (2ml) tray, 15 vial (6ml) tray and CAN cable. Injection volume range from 0.1 to 100 microliters.	<b>G1327A</b>
<b>1100 Cooled Autosampler Upgrade Kit</b> Upgrades an existing 1100 autosampler (G1313A) to allow sample cooling.	<b>G1395A</b>
<b>1100 Well-Plate Autosampler</b> Includes well-plate autosampler with well-plate tray for two well-plates and 10 x 2 ml vials, Rheodyne injection valve and 0.5 m CAN cable.	<b>G1367A</b>
<b>1100 Thermostatted Well-Plate Sampler</b> Includes well-plate autosampler with well-plate tray, sample thermostat, Rheodyne injection valve and CAN cable.	<b>G1368A</b>
<b>1100 Micro Well-Plate Sampler</b> Includes micro well-plate autosampler with well-plate tray, electrically actuated Rheodyne micro injection valve and 0.5-m CAN cable.	<b>G1377A</b>
<b>1100 Capillary LC System</b> Includes micro vacuum degasser, capillary pump, thermost, micro ALS, thermostatted column compartment, DA detector with 500 nl flow cell, LAN and 3D ChemStation.	<b>G1388A</b>
<b>1100 Manual Injector</b> Includes Rheodyne 7725 manual injection valve, 20 ul sample loop and mounting stand.	<b>G1328A</b>
<b>220 Micro Plate Sampler System</b> Provides sampling from micro- or deep-well plates, vials, tubes. Includes racks for plates, dilutor, valve, 20 ul loop, S/W (INB22000), safety shield.	<b>G2250A</b>

### Select a fraction collector

<b>1100 Series Fraction Collector</b> High flow version with short needle for deep well-plates and vials from 48 mm up to 100 mm in height.	<b>G1364A</b>
<b>220 MPS Fraction Collection Accessory</b> Enables fraction collection in well-plates or tubes and color-coded sample/fraction tracking. Includes valve kit and software (INB22001).	<b>G2251A</b>

### Select an on-line vacuum degasser

<b>1100 Vacuum Degasser</b> Includes 4 channel vacuum degasser	<b>G1322A</b>
<b>1100 Micro Degasser</b> Includes 4 channel vacuum degasser	<b>G1379A</b>

### Select a thermostatted column compartment

<b>Thermostatted Column Compartment</b> Includes column compartment with two heat exchangers for solvent pre-heating, column identification module and CAN cable.	<b>G1316A</b>
<b>Column Switching Option</b>	<b>G1316A #055</b>
<b>Micro Column Switching Option</b>	<b>G1316A #056</b>



## 1100 Series Modules

### Select a

#### ➤ detector from the 1100 Series



**1100 Series Variable Wavelength Detector**  
Built in holmium oxide filter



**1100 Series Diode Array Detector**  
190-950 nm with programmable slit



**1100 Series Multiple Wavelength Detector**



**1100 Series Fluorescence Detector**  
Optional sample cuvette



**1100 Refractive Index Detector**  
Including solvent recycle valve

DESCRIPTION	PRODUCT NO.
<b>Detectors</b>	
<i>1100 Variable Wavelength Detector</i> Includes variable wavelength detector with deuterium lamp, Lan interface and CAN cable. No flow cell included.	G1314A
<b>Standard Flow Cell</b> Includes stainless steel flow cell with 10 mm path length and 14 microliter volume. Pressure tight up to 40 bar.	G1314A #018
<b>Semi-micro Flow Cell</b> Includes stainless steel flow cell with 6 mm path length and 5 microliter volume, pressure tight up to 120 bar.	G1314A #016
<b>Micro Flow Cell</b> Includes stainless steel flow cell with 5 mm path length and 1 microliter volume. Pressure tight up to 40 bar.	G1314A #020
<b>High Pressure Flow Cell</b> Includes stainless steel flow cell with 10 mm path length and 14 microliter volume. Pressure tight up to 400 bar.	G1314A #021
<b>1100 Diode Array Detector</b> Includes diode-array detector with long-life deuterium and tungsten lamp, CAN cable, no flow cell included.	G1315B
<b>Standard Flow Cell</b> Includes standard steel flow cell with 10 mm path length and 14 microliter volume. Pressure tight up to 40 bar.	G1315B #018
<b>Semi-micro Flow Cell</b> Includes stainless steel flow cell with 6 mm path length and 5 microliter volume, pressure tight up to 120 bar.	G1315B #016
<b>500 Nanoliter Flow Cell</b> Includes quartz flow cell with 10 mm path length and 500 nanoliter volume in steel housing and connecting capillaries. Pressure tight up to 40 bar.	G1315B #014
<b>Micro High Pressure Flow Cell</b> Includes stainless steel flow cell with 6 mm path length and 1.7 microliter volume. Pressure tight up to 400 bar.	G1315B #020
<b>Prep Flow Cell 3 mm 120 bar</b> Includes stainless steel flow cell with 3 mm path length and 4 microliter volume, pressure tight up to 120 bar.	G1315B #022
<b>Prep Flow Cell 0.3 mm 20 bar quartz</b> Includes a quartz cell with 0.3mm path length, pressure tight up to 20 bar, PTFE connection tubings (i.d. 0.5 and 0.8 mm).	G1315B #024
<b>1100 Multiple Wavelength Detector</b> Includes diode-array based detector with long-life deuterium and tungsten lamp. CAN cable. No flow cell included.	G1365B
<b>Semi-micro Flow Cell</b> Includes stainless steel flow cell with 6mm path length and 5 microliter volume, pressure tight up to 120 bar.	G1365B #016
<b>Standard Flow Cell</b> Includes stainless steel flow cell with 10mm path length and 13 microliter volume, pressure tight up to 120 bar.	G1365B #018
<b>Prep Flow Cell 3 mm 120 bar SST</b> Includes stainless steel flow cell with 3 mm path length and 4 microliter volume, pressure tight up to 120 bar, SST connection capillaries (i.d. 0.5mm).	G1365B #022
<b>High Pressure Micro Flow Cell</b> Includes stainless steel flow cell with 6mm path length and 1.7 microliter volume, pressure tight up to 400 bar.	G1365B #020
<b>1100 Fluorescence Detector</b> For multi-wavelength detection, on-line acquisition of excitation and emission spectra. Includes 8 ul flow cell.	G1321A
<b>Fluorescence Detector Flow-thru Cuvette</b> For off-line measurement, quartz cell with 8 ul volume, pressure tight up to 20 bar, 1 ml syringe, wide bore capillaries.	G1321A #025
<b>1100 Refractive Index Detector</b> Includes flow cell and solvent recycle valve, pressure tight up to 7 bar.	G1362A



## An LC/MSD for the chromatographer

The 1100 Series LC/MSD provides information quickly in one chromatographic run. It provides molecular weight, structural information and has excellent selectivity needed to identify compounds, check the purity of chromatographic peaks and quantitate trace level samples in complex matrices in a rugged, reliable, easy-to-use benchtop system.

### Ordering options for total flexibility

- Two models of the popular LC/MSD quad set new standards for performance and value for quadrupole LC/MS systems.

#### LC/MSD SL

- For chromatographers and mass spectrometrists who need the utmost in sensitivity, the LC/MSD SL makes analyses in the very low picogram range possible.

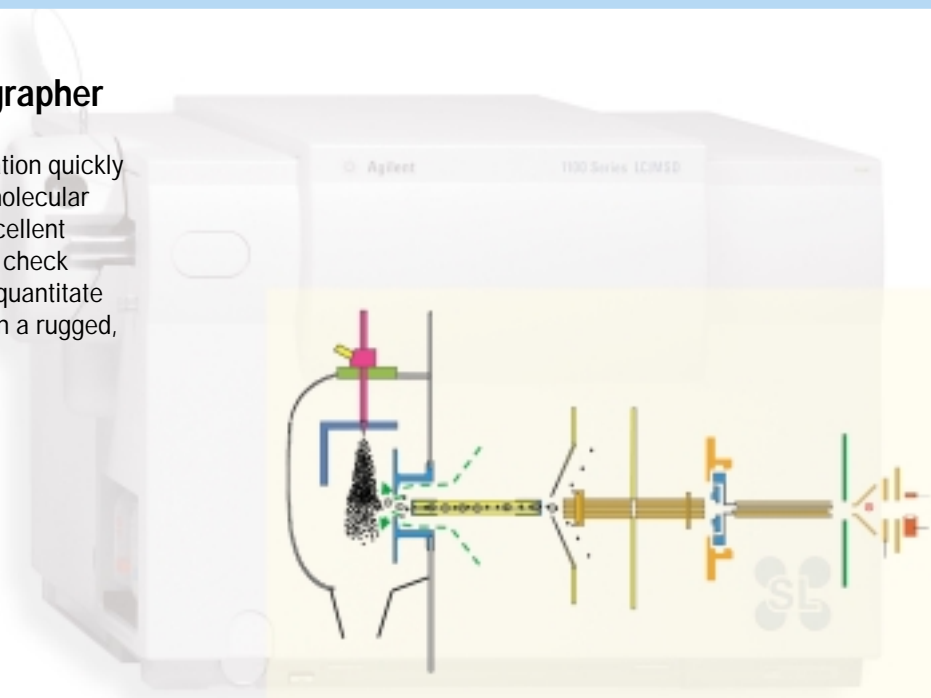
#### LC/MSD VL

- The economical LC/MSD VL lowers the barrier to putting the power of Agilent's LC/MS technology in every laboratory.

### The LC/MSD for the Chromatographer

- Improved signal to noise ratio.
- Increased sensitivity – by a factor of 10 to 100.
- No contamination of ion optics.
- Full-scan mode for rapid detection.
- SIM (selective ion monitoring) mode for highest sensitivity of unknown compounds.
- Integrated software platform for both MS and LC.

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



Orthogonal spray orientation and high-capacity drying gas system improve instrument performance and decrease maintenance requirements

DESCRIPTION	PRODUCT NO.
LC/MSD API-Electrospray SL System 1100 Series LC/MSD module, APCI-Electrospray source, PC/Printer and LC/MSD ChemStation software for data acquisition and data analysis.	G2708DA
LC/MSD APCI SL System 1100 Series LC/MSD module, APCI source, PC/Printer and LC/MSD ChemStation software for data acquisition and data analysis.	G2707DA
LC/MSD API-Electrospray VL System Includes 1100 Series LC/MSD module, API-Electrospray source, PC/Printer, and LC/MSD ChemStation software for data acquisition and data analysis.	G2708CA
LC/MSD APCI VL System Includes 1100 Series LC/MSD module, APCI source, PC/Printer, and LC/MSD ChemStation software for data acquisition and data analysis.	G2707CA
APCI Source Includes APCI spray chamber, corona discharge needle, nebulizer, APCI vaporizer and test calibration kit.	G1947A
API-Electrospray Source Includes API-ES spray chamber, nebulizer and test calibration kit.	G1948A
APPI Source Includes APPI spray chamber, power supply, communication cable, power cord, nebulizer, vaporizer, photoionization lamp and test calibration.	G1971A
LC/MSD ChemStation Software For system control, acquisition & eval. of chromatographic and spectral data from one 1100 LC/MSD. Includes DAD & MS spectral analysis capability.	G2710AA
1100 LC/MSD Data Analysis Software	G2730AA
Software to add 1100 LC/MSD to an existing 3D HPLC ChemStation	G2715AA
1100 LC/MSD Deconvolution and Bioanalysis Software	G2720AA
MSD Easy Access Software for LC/MSD Includes installation and familiarization.	G2725AA

## 1100 Series LC/MSD Trap

### Identify target compounds faster and with more confidence

The Agilent 1100 Series LC/MSD Trap is a high performance liquid chromatograph/mass spectrometer (LC/MS<sup>n</sup>) ion trap system that gives scientists the MS/MS and MS<sup>n</sup> data they need to solve challenging research questions faster and with more confidence.

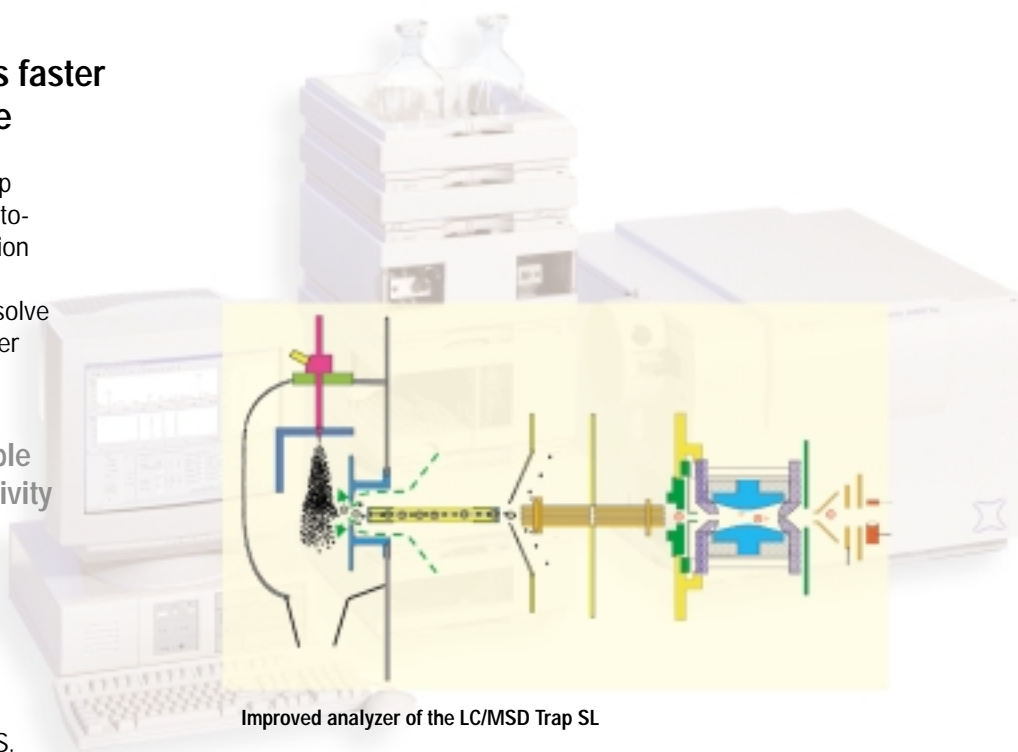
### The most sensitive trap available with excellent full-scan sensitivity

#### LC/MSD Trap SL capabilities:

- 2,200 m/z standard and 4,000 m/z extended mass range.
- Fast, automated determination of charge state for intelligent MS/MS.
- Manual MS<sup>n</sup>.
- High-speed positive/negative ion mode polarity switching (~0.5 seconds).
- Advanced auto MS<sup>n</sup> with a preferred mass list and time-based dynamic exclusion.
- New data-dependent maximum resolution scan mode.
- Fastest automation determination of charge state on-the-fly for intelligent MS/MS.
- SmartFrag for quality MS/MS on the first try.

#### LC/MSD Trap VL capabilities:

- MS/MS high scan sensitivity.
- 2,200 m/z mass range.
- Automatic MS/MS.
- Standard-speed positive/negative mode polarity switching (~2 seconds).



Improved analyzer of the LC/MSD Trap SL

#### DESCRIPTION

#### PRODUCT NO.

*LC/MSD Trap SL System  
Includes 1100 Series LC/MSD Trap module, API-Electrospray source, PC, printer and LC/MSD ChemStation software for data acquisition and data analysis.*

**G2440DA**

*LC/MSD Trap VL System  
Includes 1100 Series LC/MSD Trap module, API-Electrospray source, PC, printer and LC/MSD ChemStation software for data acquisition and data analysis.*

**G2440CA**

*APCI Source for 1100 LC/MSD Trap  
Includes APCI spray chamber, corona discharge needle, nebulizer, APCI vaporizer and test calibration kit.*

**G1947A**

*APPI Source for 1100 LC/MSD Trap  
Includes APPI spray chamber, power supply, communication cable, power cord, nebulizer, vaporizer, photoionization lamp and test calibration.*

**G1971A**

*LC/MSD Trap Deconvolution and Bioanalysis Software  
For deconvolution of multiply charged ion series and software for protein and peptide data evaluation.*

**G1981AA**

*LC/MSD Trap ChemStation Data Analysis Software  
For off-line data evaluation.*

**G2450AA**

### Switching between interfaces is simple and fast

With a choice of ionization modes, the Agilent LC/MSD can be used to analyze a wide range of sample types – from pharmaceuticals to large proteins. Your choice of ionization sources for MSD and MSD Trap include:

#### ESI – Electrospray Ionization

- Patented orthogonal spray ion source design provides exceptional sensitivity and reproducibility over a wide range of LC operating conditions.
- Ideal for charged and polar compounds.
- The orthogonal spray orientation keeps the capillary cleaner.
- The ion source is very tolerant of non-volatile components in samples or mobile phase.
- Unsurpassed sensitivity for demanding applications (SL model).
- Lower detection limits – high sensitivity.
- More functionality – tools for automation and enhanced productivity.

#### APCI – Atmospheric Pressure Chemical Ionization

- Rugged, low maintenance pre-aligned.
- Ideal for thermally stable analytes, compounds of intermediate MW and polarity, compounds containing heteroatoms and compounds with poor electrospray response.



#### Syagen PhotoMate™ APPI – Atmospheric Pressure Photoionization

- Relative low ionization energy causes minimal fragmentation resulting in easy identification of molecular weights.
- Can ionize compounds that are difficult to ionize using other API techniques.

#### On-line Nanospray

- Integrated with the 1100 capillary LC system.
- Highest sensitivity at nanoliter flow rates.

#### Use with other HPLC models for highly sensitive detection

The Agilent 1100 Series LC/MSD is intended to be used primarily with the 1100 Series HPLC modules, but it may be used with other HPLC models. Its design is compatible with 1.0 to 4.0 mm columns, and also 2.1 mm narrow bore and 0.3 to 1.0 mm capillary columns.

#### Easy Access Software

Agilent's new system makes confirmation of compounds remarkably fast and easy, even for users without mass spectrometry expertise.

- LC and LC/MS software for shared systems.
- Walk up simplicity.

### Additional systems designed with you in mind ... let us help you configure the best solution

#### Agilent 1100 Series LC Value System

An economical starter bundle, designed for pharmaceutical QA/QC and general HPLC users. In a small footprint, you get state-of-the-art hardware and software for easy, high-quality HPLC at a surprisingly low cost.

#### Agilent 1100 Series Well-Plate LC Systems

Agilent offers complete solutions for high sample throughput. A variety of well-plate samplers are available in standard and thermostatted versions. The samplers add maximum flexibility and fast injection cycles to the system and are considerably faster than a standard Agilent 1100 Series autosampler.

#### Agilent 1100 Series Capillary LC System

The Agilent 1100 Series Capillary LC system is designed for increased sensitivity and for analyzing limited sample volumes typically found in the biopharmaceutical research environment. It uses a unique pump technology that optimizes the system for capillary LC, offering a high level of sensitivity and reproducibility.

#### Agilent 1100 Series GPC-SEC Analysis System

The Agilent 1100 Series GPC system offers easy and reliable polymer characterization. The precision of its isocratic solvent delivery system provides the constant, stable flow rate that is essential to maintain high resolution. The high flow precision and the excellent temperature stability of the Agilent 1100 Series thermostatted column compartment ensure the highest accuracy and precision of molecular weight determinations.

#### Agilent 1100 Series Purification System

The Agilent 1100 Series system has been expanded to include preparative capabilities offering well-plate technology. It is an ideal solution for high throughput HPLC analyses and purification. The Agilent 1100 Series preparative pump forms the basis of Agilent's purification system.

The addition of an Agilent 1100 Series LC/MSD provides for molecular weight confirmation, mass-based fraction collection (up to 16 different m/z values per sample), sample purification and purity verification. See page 28 for more details.

#### MS for Combinatorial Chemistry

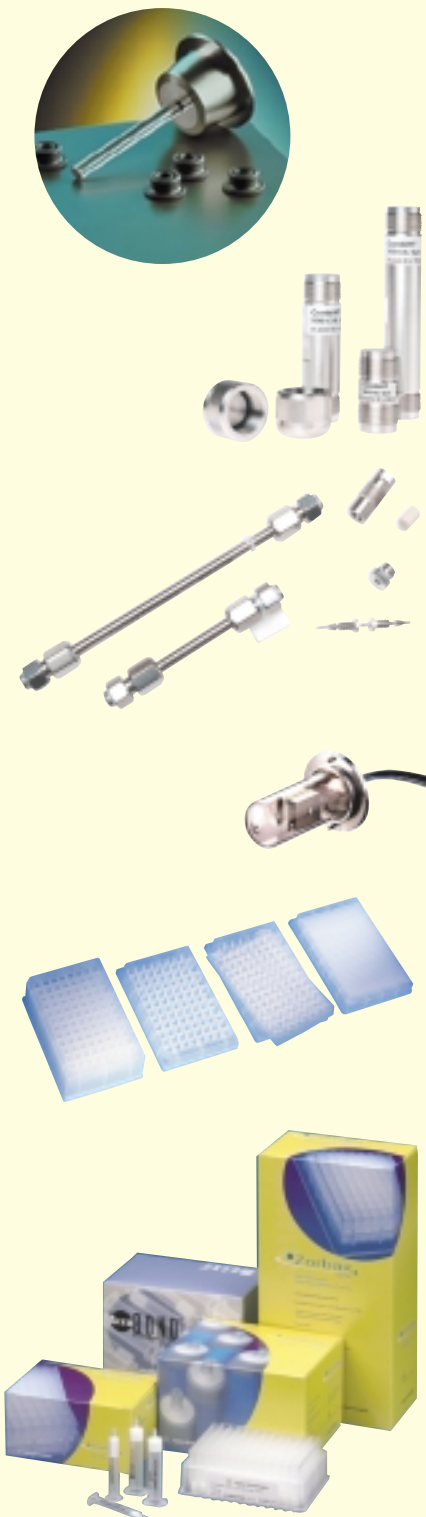
Using Agilent's system you can rapidly identify the products of combinatorial syntheses and estimate their purities before screening. As a result, you get fast validation of combinatorial methods and efficient confirmation of large combinatorial synthesis projects.

With this system, you can generate and optimize drug leads with remarkable ease and speed – without mass spectrometry expertise.



## LC Consumables and Accessories

Maximize your instrument uptime  
with original Agilent supplies at  
[www.agilent.com/chem](http://www.agilent.com/chem)



DESCRIPTION	PRODUCT NO.
<b>Pump Module Supplies</b>	
Maintenance kit (outlet cap, PTFE frits (10), pump seals (4), outlet gold seal, inlet filters (2), valve cartridge)	G1311-68710
Sapphire plunger	5063-6586
Plunger seals (2/pk), graphite-filled Teflon	5063-6589
Plunger seals (2/pk), polyethylene for normal phase	0905-1420
Sieves (SS) for outlet valve (10/pk)	5063-6505
Cartridge for active inlet valve	5062-8562
Glass filter, solvent inlet	5041-2168
Solvent reservoir, 1 liter with cap	9301-1421
Solvent tubing, 5m, 1.5 mm id, 3 mm od	5062-2483
<b>Online Degasser Supplies</b>	
Online degasser accessory kit (screws (8), bushings (8), markers (4), tubing from degasser to pump, syringe, adapter)	G1322-68705
<b>Autosampler Supplies</b>	
Maintenance kit (Vespel rotor seal, needle, needle seat, metering seals (2), finger caps (15))	G1313-68709
Multi-draw upgrade kit (seat capillary 500 µl, seat capillary 1500 µl, ZDV union)	G1313-68711
Rotor seal, Vespel	0100-1853
Needle, autosampler	G1313-87201
<b>Well-Plate Autosampler Supplies</b>	
384 Well Plate, PP, 30/pk	5042-1388
96 Deep Well Plate, 1 ml, PP, 32/pk	5042-1387
96 Well Plate with glass inserts, caps, septa preassembled, 0.35 ml	5065-4402
96 Well Plate, 0.5 ml, PP, 10/pk	5042-1386
96 Well Plate, 0.5 ml, PP, 120/pk	5042-1385
<b>Connecting Capillaries and Fittings</b>	
Connecting capillary, w/ fittings, 9 cm, 0.17 mm id	G1316-87300
Connecting capillary, w/ fittings, 18cm, 0.17 mm id	G1313-87305
Connecting capillary, w/ fittings, 39cm, 0.17 mm id	G1315-87311
Connecting capillary w/ fittings, 60 cm, 0.17 mm id	G1312-67305
1/16" SS fittings, front and back ferrules, 10/pk	5062-2418
1/16" SS long fittings, front and back ferrules, 10/pk	5065-4454
Colored PEEK finger tight fittings, 10/pk	5065-4426
Flexible tubing (SS), w/o fittings, 10.5cm, 0.17 mm id	5021-1816
Flexible tubing (SS), w/o fittings, 15 cm, 0.17 mm id	5021-1817
Flexible tubing (SS), w/o fittings, 10.5 cm, 0.12 mm id	5021-1820
Flexible tubing (SS), w/o fittings, 15 cm, 0.12 mm id	5021-1821
<b>Detector Lamps</b>	
Deuterium lamp for DAD	2140-0590
Tungsten lamp	G1103-60001
Deuterium lamp for VWD	G1314-60100
<b>HPLC Column Kits</b>	
Fast Eclipse XDB Method Development Kit	5183-4627
Fast Stablebond Method Development Kit	5183-4625
RP-Method Development Kit - 4 mm id	5063-6516
RP-Method Development Kit - 2 mm id	5063-6529
Traditional Eclipse XDB Method Development Kit	5183-4626
Traditional Stablebond Method Development Kit	5183-4624
ZORBAX Starter Kit, 5 µm, C18	5183-2021
ZORBAX Starter Kit, 5 µm, C8	5183-2022

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



## Choose the system that meets your needs

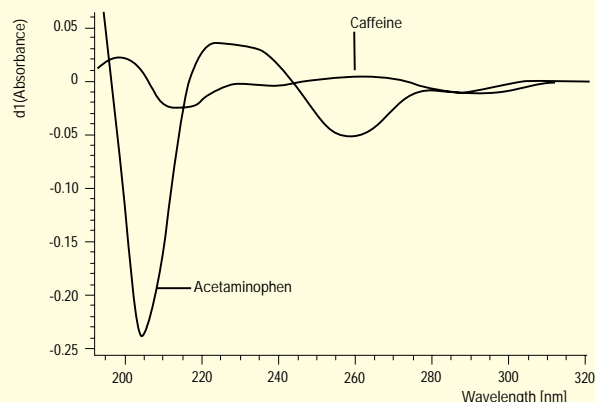
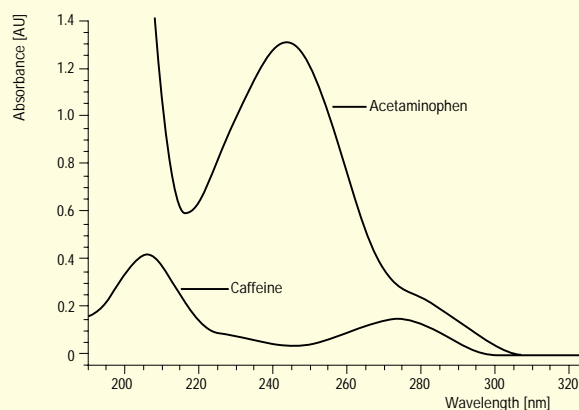
### A variety of systems to meet your application needs

The Agilent 8453 is the most productive UV-Visible spectroscopy system available. You'll get more work done in less time with its combination of ease of use, fast spectral acquisition, fast data evaluation, report generation and automation. A full range of sampling accessories (including sipper, autosampler and multicell transport) are software controlled to further enhance automation.

### Dissolution Testing System

- Maximum flexibility and productivity.
- Scalable sampling from manual off-line through fully automated on-line with up to four baths.
- Integration into fully automated robotic systems.
- Customized calculations and result reports.
- Built-in tools for compliance with GLP requirements.

DESCRIPTION	PRODUCT NO.
<b>8453 UV-Visible Value System</b> <i>Includes spectrophotometer, PC, CD-ROM, monitor, software, and printer.</i>	<b>G1812AA</b>
<b>8453 Pharmaceutical UV-Visible System</b> <i>Includes spectrophotometer, PC, CD-ROM, monitor, general purpose, advanced and Security Pack software and printer.</i>	<b>G1815AA</b>
<b>8453 Dissolution System</b> <i>Complete systems including IQ and OQ/PV Includes spectrophotometer, dissolution software and sampling systems.</i>	
<b>8453 OQ/PV</b> <i>Tests discrete subsystems and integrated testing of complete instrument.</i>	<b>H4036A</b>
<b>Accessories</b>	
<i>Peltier Temperature Controller</i>	<b>89090A</b>
<i>External Temperature Sensor</i>	<b>89090A #200</b>
<i>Eight-Position Multicell Transport</i>	<b>G1120A</b>
<i>Automated Sipper System for 8453</i>	<b>89068D</b>
<i>XY Autosampler</i>	<b>G1811A</b>
<i>Thermostatable Cell Holder</i>	<b>89054A</b>
<i>Cell Stirring Module</i>	<b>89055A</b>
<b>8453 Lamps</b> <i>Deuterium lamp assembly</i>	<b>2140-0605</b>



Absorbance spectra (top) and first-order derivatives (bottom)

# Software for the 8453 UV-Visible Spectrophotometer

## Software for Agilent 8453 and 8452 Spectrophotometers

The Agilent ChemStation for UV-Visible spectroscopy provides instrument control, data acquisition and data evaluation for the Agilent 8453 spectrophotometers. Task-based graphical user interfaces make the software very easy-to-use.

### General Purpose Software

Agilent ChemStation general purpose software for UV-Visible spectroscopy allows control of instrument and accessories and standard general data features.

The general purpose software controls the 8453 and 8452 spectrophotometers and accessories. It includes all the functionality you need for general purpose and routine testing and is perfect for QA/QC labs. Featuring a highly interactive graphical user interface, it's more intuitive and easier to learn and use than ever. Includes an extensive on-line help system for tutorial assistance and how-to instructions.

### Advanced UV-Visible Software

This add-on software provides a more flexible system for research and methods development, with easy transfer of the methodologies to the QA/QC lab. It includes advanced capabilities such as:

- Multi-component analysis.
- Method optimization tools.
- Confirmation analysis.
- Macro programming.
- Advanced automation.
- Advanced spectral processing and data analysis functions.

### Biochemical Analysis Software

This add-on software is designed for the needs of biochemists. It includes standard methods for qualitative and quantitative analysis of nucleic acids and proteins, single and multicell kinetics with various rate calculations. Add the optional Peltier temperature controller to perform thermal denaturation studies such as DNA melt testing and protein unfolding.

### Agilent ChemStation dissolution testing software

A dedicated pharmaceutical application software for the Agilent 8453 spectrophotometer for dissolution testing.

DESCRIPTION	PRODUCT NO.
<i>General Purpose UV-Visible ChemStation Software</i> <i>Includes full control of 8453 and 8452 spectrophotometers and accessories, standard tasks, verification and diagnostics mode.</i>	G1115AA
<i>Advanced UV-Visible Software</i> <i>Adds method development tools, advanced data analysis functions, multicomponent analysis, confirmation analysis, macro programming.</i>	G1116AA
<i>Biochemical Analysis Software</i> <i>Adds biochemical application features such as single and multicell kinetics, nucleic acid analysis and thermal denaturation studies.</i>	G1117AA
<i>Dissolution Software</i> <i>Adds off-line and on-line dissolution testing capabilities to the general purpose software.</i>	G1118AA
<i>UV-Visible ChemStation Software Upgrade</i>	G1102AA
<i>Dissolution Testing Software Upgrade</i>	G1810AA
<i>Security Pack for UV-Visible ChemStation</i> <i>Modifies advanced and dissolution testing software to support the requirements for electronic records and signatures (21 CFR Part 11).</i>	G1813AA

### Security Pack for UV-Visible ChemStation

Modifies advanced and dissolution testing mode to support the requirements for electronic records and signatures (21 CFR Part 11).

# 2100 Bioanalyzer

## The first commercially available lab-on-a-chip product - your personal assistant in life science

The Agilent 2100 bioanalyzer is a unique analysis tool capable of handling nucleic acids, proteins, and cells on one platform. The specific applicability to certain sample classes is based on the use of kits that include sample-specific reagents and chips. LabChip® kits for a variety of RNA, DNA, protein and cell assays are available.

Together with the LabChip kits, developed by Caliper Technologies Corp., the Agilent 2100 bioanalyzer integrates

sample handling

separation and detection

and data analysis within a single, compact system.

With lab-on-a-chip...

- Miniaturized fluid pathways give shortened run times
- Micro-fabricated chips yield better reproducibility than conventional technologies
- Versatile chip design enables flexible experiment design on one system
- Microscale format minimizes sample use



DESCRIPTION	PRODUCT NO.
<b>Agilent 2100 Bioanalyzer System</b> <i>Includes 2100 bioanalyzer, HP PC and color printer, bioanalyzer system software, vortex mixer with chip adapter, and startup accessories. With startup service and operational services.</i>	G2940BA
<b>Agilent 2100 Bioanalyzer Multi-Instrument System</b> <i>Includes 2100 bioanalyzer, HP PC and color printer, RS 232 4-port card, bioanalyzer system software, vortex mixer with chip adapter, and startup accessories. With startup service and operational services.</i>	G2942BA
<b>Agilent 2100 Bioanalyzer Laptop System</b> <i>Includes 2100 bioanalyzer, HP Omnibook and color printer, bioanalyzer system software, vortex mixer with chip adapter, and startup accessories. With startup service and operational services.</i>	G2943BA
<b>Agilent 2100 Bioanalyzer Instrument</b> <i>Includes chip priming station, test chip kit, setup poster, site and safety manual. Additional instrument for multi-instrument operation.</i>	G2938B
<b>Cell Assay Extension</b> <i>Enables simple flow cytometric analysis with the Agilent 2100 bioanalyzer. Includes pressure cartridge, cell fluorescence software, cell fluorescence checkout kit, and cell test chip kit. With startup service and operational service.</i>	G2944AA
<b>Agilent 2100 Bioanalyzer Software Package</b> <i>Includes bioanalyzer system software. Only needed for use with the Agilent 2100 bioanalyzer instrument (G2938B) if ordered stand-alone. With start-up service and operational services.</i>	G2941AA
<b>Agilent 2100 Bioanalyzer Data Organizer</b> <i>Software for a data storage and retrieval application with web-based search capability. For data files generated with the Agilent 2100 bioanalyzer.</i>	G2945AA

It's really easy . . .

. . . Prepare chip . . .

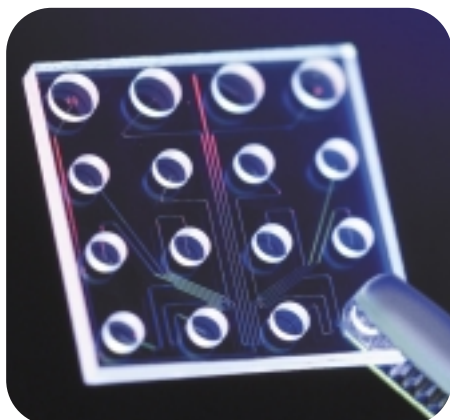
. . . Run analysis . . .

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

. . . Check results.

The Agilent 2100 Bioanalyzer products are only available in selected countries. Please contact Agilent Technologies directly with your inquiries.

## Kits, Accessories and Consumables for the Agilent 2100 Bioanalyzer



### Ordering options for total flexibility

The Agilent 2100 Bioanalyzer is supplied with operating software, PC, printer and a variety of accessories.

#### Single bioanalyzer system

A simple PC controlling a single 2100 bioanalyzer unit.

#### Multi bioanalyzer system

A powerful PC with capabilities to control up to four 2100 bioanalyzer units.

#### Laptop bioanalyzer system

A laptop controlling a single 2100 bioanalyzer, saving valuable bench space.



LabChip® and the LabChip Logo are registered trademarks of Caliper Technologies Corp. in the U.S. and other countries.

DESCRIPTION	PRODUCT NO.
<b>RNA 6000 Nano LabChip Kit</b> <i>For analysis of messenger and total RNA. Kit includes reagents, supplies, 25 LabChips, 2 cleaning chips, 1 syringe, and reagent kit guide. A lower marker is included with the RNA Nano reagents. Note: For quantitation of RNA samples, an RNA 6000 Ladder (cat # 7152) must be purchased from Ambion, Inc.</i>	5065-4476
<b>Ambion RNA Ladder</b> <i>3 vials RNA ladder - 20 µl aliquots. To be ordered from Ambion Inc.</i>	Ambion Cat # 7152
<b>DNA 500 LabChip Kit</b> <i>For sizing and quantitation of dsDNA fragments from 25 to 500 bp. Kit includes reagents, supplies, 25 LabChips, 1 cleaning chip, 1 syringe, and reagent kit guide.</i>	5064-8284
<b>DNA 1000 LabChip Kit</b> <i>For sizing and quantitation of dsDNA fragments from 25 to 1000 bp. Kit includes reagents, supplies, 25 LabChips, 1 cleaning chip, 1 syringe, and reagent kit guide.</i>	5065-4449
<b>DNA 7500 LabChip Kit</b> <i>For sizing and quantitation of dsDNA fragments from 100 to 7500 bp. Kit includes reagents, supplies, 25 LabChips, 1 cleaning chip, 1 syringe, and reagent kit guide.</i>	5064-8230
<b>DNA 12000 LabChip Kit</b> <i>For sizing of dsDNA fragments from 100 to 12000 bp. Kit includes reagents, supplies, 25 LabChips, 1 cleaning chip, 1 syringe, and reagent kit guide.</i>	5064-8231
<b>Protein 200 Plus LabChip Kit</b> <i>For sizing and analysis of proteins from 14 to 200 kD. Kit includes reagents, supplies, 25 LabChips, 1 cleaning chip, 1 syringe and reagent kit guide.</i>	5065-4480
<b>Cell Fluorescence LabChip Kit</b> <i>For analysis of fluorescence parameters of cell samples. Includes reagents, 25 LabChips, and reagent kit guide.</i>	5065-4488
<b>Cell Fluorescence Checkout Kit</b> <i>For testing proper cell assay operation. Includes reagents, 7 Checkout LabChips, red beads, blue beads, and reagent kit guide.</i>	5065-4486
<b>Test Chip Bundle</b> <i>Used to aid in instrument troubleshooting and diagnosis. Includes 5 leak current test chips, 1 autofocus test chip, 1 electrode/diode test chip.</i>	G2938-68100
<b>16-Pin Cartridge</b> <i>Removable electrode cartridge containing 16-pin electrode assembly configured to fit in the wells of a LabChip. For molecular assays.</i>	5064-8244
<b>16-Pin Bayonet Cartridge</b> <i>Removable cartridge with detachable 16-pin electrode assembly for easy cleaning. Pin set layout identical with 16-pin cartridge. For molecular assays.</i>	5065-4413
<b>Pressure Cartridge</b> <i>Removable cartridge with pressure adapter. For use with an additional Agilent 2100 bioanalyzer (G2938B) in a multi-instrument system equipped with the Cell Assay Extension (G2944AA).</i>	5065-4492
<b>Chip Priming Station</b> <i>Used to load gel matrix into a chip with a syringe provided with each LabChip kit. Includes priming station, stop watch and 2 syringe clips.</i>	5065-4401
<b>Vortex Mixer Adapter</b> <i>Replacement part for IKA vortexer. Foam insert and plastic head mount for vortexer. Designed to hold chip firmly in place while vortexing.</i>	5022-2190
<b>Cell Test Chip Kit</b> <i>Includes cell autofocus chip and documentation.</i>	G2938-68200
<b>Adjustable Clip</b> <i>Used together with syringe to apply defined pressure for chip priming.</i>	5042-1398
<b>Gasket Kit for Chip Priming Station</b> <i>Includes 1 syringe adapter, 10 gaskets and 1 mounting ring.</i>	G2938-68716
<b>Fuse for Power Supply</b> <i>1A/250 V</i>	2110-0007
<b>RS 232 Connector Cable</b>	G2938-81605
<b>Pressure Adapter Kit</b> <i>Includes 1 mounting ring and 5 pressure adapters with gaskets.</i>	5065-4478

The Agilent 2100 Bioanalyzer products are only available in selected countries. Please contact Agilent Technologies directly with your inquiries.

## Microarray Scanner

### Agilent's automated DNA Microarray Scanner

Agilent's next generation microarray scanner introduces a number of quality features for high throughput analysis of industry standard, 1" x 3", glass microarray slides. Its integrated platform provides sensitive and quantitative analysis of microarrays offering researchers a comprehensive, flexible and convenient approach to analyze microarrays for gene expression.



#### Sensitive, rapid, high resolution scanning

- 48-slot carousel for high throughput.
- State-of-the-art 20mW lasers.
- Simultaneous dual color scans.
- Rapid scans – typically 8 minutes.
- Integrated bar code reader.
- Industry first dynamic auto focus for optimum microarray imaging.

#### DESCRIPTION

#### PRODUCT NO.

##### Microarray Scanner

*Includes microarray scanner, 48 position carousel, 50 slide holders, Feature Extraction and Analysis software, PC data system, system install, familiarization.*

G2565AA

##### Scanner Carousel

*Includes 48 position carousel.*

G2565AA #001

##### Scanner Slide Holder Kit

*Includes 25 slide holders.*

G2565AA #002

*Upfront Extended Warranty, 1 year*

G2565AA #11K

*Upfront Extended Warranty, 2 years*

G2565AA #11L

## Catalog Microarrays

### Consistent, quick and complete Catalog Microarrays



As an industrial-scale manufacturer, Agilent is in a position to provide QC qualified, high content microarrays on a continuing basis. Agilent's ongoing program to develop a series of pre-made, off-the-shelf microarrays, packaged as ready to go kits has started with human catalog microarrays and will be followed by a variety of additional host organism catalog microarrays.

#### DESCRIPTION

#### PRODUCT NO.

##### Human 1 cDNA Microarray Kit

*Includes four microarrays (on two 1" x 3" slides) and deposition hybridization buffer.*

G4100A

##### Human 2 cDNA Microarray Kit

G4101A

##### Reagents

##### Fluorescent Direct Label Kit

G2557A

#### Human 1 and 2 cDNA Microarray Kit

Our cDNA gene survey microarrays have many unique Incyte cDNA clones (12,000 or more different features). As a result, researchers can assay the expression level for many Human genes in one experiment. Kits include:

- microarrays to assay a specific biological system;
- hybridization reagents necessary for the assay;
- a complete protocol; and
- a compact disk containing information identifying the features on the microarrays.



## Let us configure a system that is right for you . . . from standalone workstations to complete, secure networked data systems

### Cerity Networked Data Systems

The Cerity networked data system family of software provides userspecific applications that model your everyday tasks, making every step more efficient:

#### Cerity for Pharmaceutical QA/QC – designed to:

- Adapt to the laboratory workflow.
- Follow 21 CFR Part 11, GLP, cGMP, GAMP, ISO 17025 and other regulations and quality standards.
- Offer ease of compliance.
- Provide “Level 4” instrument control.
- Boost productivity.
- Provide seamless integration into existing IT systems.
- Protect existing investments.

#### Cerity for Chemical QA/QC – it features:

- Sample centered to support typical analytical processes efficiently.
- Access to the World Wide Web, letting you send out reports instantly.
- Secure and easy-to-understand information storage and retrieval, with everything that relates to an analysis stored together.
- Powerful enough to let you fully use all features of the high-performance Agilent 6850, 6890, and 3000 Micro GCs. Also allows control of the Agilent 5890 Series II GCs.

### ChemStation Plus Data Systems consisting of

- **ChemStore Client/Server**  
An optional component of Agilent ChemStation Plus providing a central secure data organization, review and reporting tool for chemical analysis results. It is available as a standalone solution or in a fully integrated client/server network running on an Oracle database.
- **ChemStation Plus Security Pack**  
Provides full support of 21 CFR Part 11 requirements for electronic records and electronic signatures by showing advanced data security and provides full data integration and change documentation in audit trails. It is available as a standalone solution or in a fully integrated client/server network running on an Oracle database.
- **ChemAccess Client/Server**  
Offers a single approach to instrument control, data evaluation, reporting and automation as well as enhanced data security from anywhere on the network.
- **Method Validation Pack**  
The Method Validation Pack offers a flexible and comprehensive result creation with all calculations, statistics and charts for method validation according to EP/JP/USP/ICH and ISO 17025.

DESCRIPTION	PRODUCT NO.
<i>Network Data Systems Cerity</i>	
<i>Method Validation Pack</i>	G2184AA
<i>ChemStation Plus Security Pack</i> <i>Adds the secure ChemStore relational database software module to the ChemStation Plus SW for A/D, GC, CE, LC and CE/LC-MSD. Supports 21 CFR part 11.</i>	G2183AA
<i>License to use G2183AA on another PC</i> <i>Includes manual, license and media.</i> <i>Supports 21 CFR part 11.</i>	G2187AA
<i>ChemStore C/S Database Client Software</i> <i>Includes MS Access based database for data organization, review, cross sample reporting and charting. For ChemStations for LC, LC/MSD, GC, CE, CE-MSD and A/D.</i>	G2181BA
<i>ChemStore C/S Review Client License</i> <i>To execute on another PC.</i>	G2186BA
<i>ChemAccess Server Software</i>	G1494A
<i>ChemAccess 5 User Client Software</i>	G1495A
<i>12-port LAN Hub</i> <i>Allows up to twelve devices to interface to a local laboratory LAN. Includes an 8-meter LAN cable.</i>	G2402A
<i>6890 LAN Communications Interface</i> <i>Provides capability to connect a host computer over LAN. Includes ThinLan (coax) and 10/100BaseT (twisted pair) connectors, and cables.</i>	G2335A
<i>LAN Communications Interface</i> <i>For 6850 GC, 35900 A/D, and 1100 LC.</i>	G1846A
<i>Crossover Ethertwist Cable</i> <i>To connect ChemStation to a networked instrument. Includes 10 ft. crossover wired ethertwist patch cable, category 5.</i>	5183-4649
<i>ChemStore Server Software</i>	G1410A

## Multi-Technique ChemStation

### The most comprehensive multi-technique software on the market

ChemStation covers a wide range of analytical instrument control allowing you to use just one software package to do multiple analytical techniques.

#### Multi-Technique data handling

- Eliminates the need to train users on a different data station for each technique.

#### Modular software

- Configure the correct number of instruments for your needs now – and expand in the future. Data analysis only software available to evaluate data off-line.

#### Automation

- Total instrument control and system automation provide the flexibility to easily change conditions with each method.
- Automatic recalibration and run time performance allow 24-hour productivity.

#### GLP Compliance

- Agilent certificate of validation.
- Password protection.
- System verification test.
- Available OQ/PV procedures.
- Chromatographic conditions and data are logged in secured files to assure data integrity.

Multi-Technique ChemStation provides comprehensive control, automation and data handling for LC, GC, CE and A/D interfaces to collect data from non-Agilent instruments.



#### Flexible reporting capabilities

- Many standard reports as well as the ability to create custom reports for your specific needs.

#### Dynamic data exchange

- Ability to export data to Microsoft® Excel or other software of your choice for analysis and reporting.

#### Networking

- Compatible with PC networks that support Microsoft® Windows.
- LAN interface to Agilent instruments
- Available ChemAccess Client/Server system.

#### Industry standard

Uses industry standard formats, including the following:

- Microsoft® Windows
- Analytical Data Interchange (AIA)
- Windows Metafile (WMF)
- Open Database Connectivity (ODBC)

## Data handling

Software includes installation and familiarization



ChemStation bundles include software, PC, printer and monitor.

Data handling and control for Agilent chromatographic instruments

**Note:** The following software requires a 200 MHZ PC with 64MB of RAM minimum.

DESCRIPTION	PRODUCT NO.
GC	
ChemStation Software for one GC	G2070AA
ChemStation software for additional GC	G2071AA
GC ChemStation Software License to execute ChemStation on another PC. Includes license and user information only.	G2075AA
A/D	
ChemStation software for A/D	G2072AA
ChemStation software for additional A/D	G2073AA
A/D ChemStation Software License to execute ChemStation on another PC. Includes license and user info only.	G2077AA
HPLC	
HPLC 2D ChemStation Software	G2170AA
ChemStation Software for additional 2D LC	G2171AA
HPLC 2D license to execute on another PC Includes license and user information only.	G2175AA
HPLC ChemStation Spectral SW Module Adds capability to evaluate DAD and FLD spectra to an HPLC 2D ChemStation.	G2180AA
HPLC 3D Spectral Module license to execute on another PC. Includes the license and the user information only.	G2185AA
CE	
ChemStation software for CE Systems	G1601A
ChemStation software for additional CE	G2172AA
Data Analysis Only	
ChemStation Software Data Analysis Only Used for evaluation of GC, 2D LC (no diode array or MSD) and A/D data only.	G2090AA
HPLC ChemStation Data Analysis Software Includes data evaluation only of chromatographic and LC spectral data.	G2190AA
ChemStation Bundles	
Single Instrument GC ChemStation	G1875AA
High Performance GC ChemStation	G1876AA
Single Instrument LC 2D ChemStation	G1317A
Single Instrument LC 3D ChemStation	G1319A
Single Instrument A/D ChemStation	G2112AA

DESCRIPTION	PRODUCT NO.
3396 Series III Integrator Includes instrument control (INET), BASIC programming, 256 KB RAM, two PCMCIA expansion slots and INET cable.	3396C
3395 General-Purpose Integrator Includes 128 KB RAM, and general purpose signal, remote, and sample number cables. Does not include BASIC programming, INET or expansion slots.	3395B
GPIB interface board for PC	82350A
Dual-channel A/D interface box	35900E
General purpose remote and signal cables.	35900E #001
TCP/IP LAN board options, connects to ChemStation or ChemServer product.	35900E #010
GPIB board option connects to ChemStation product.	35900E #011

## Support Services

### Flexible support services to give you exactly what you need

Agilent support services cover all of your Agilent chemical analysis hardware and software maintenance, troubleshooting, repair, compliance and educational needs. With these services, you can achieve:

- Maximized instrument uptime.
- High system productivity.
- Extended instrument life.
- Fast problem resolution.



### Industry service bundles meet specific needs

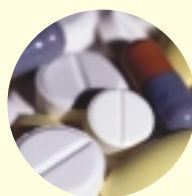
Special service bundles are designed to meet the specific chemical analysis instrument needs of various industries. These bundles contain essential services to keep your chemical analysis instruments in top condition for dependable operation. The special service bundles cost less than purchasing each service individually.

#### Training Courses

Agilent chemical analysis training courses help you get the most out of your investment by teaching you the skills you need to fully utilize your system's capabilities. More than 50 courses are offered, ranging from introductory levels to in-depth hands-on learning experience. For up-to-date training information and 24-hour a day registration, connect to our web site at [www.agilent.com/chem](http://www.agilent.com/chem).

#### Pharmaceutical Bundle

For the pharmaceutical, agricultural and other industries that must comply with rigorous quality and regulatory requirements.



- Telephone Support to Isolate and Resolve Hardware Problems – included without charge
- At-Your-Site Service with consumables used during repair
- Annual On-Site Preventive Maintenance
- Annual Operational Qualification/Performance Verification

#### Petrochemical Bundle

For the specific needs of the petroleum, chemical, petrochemical and other industries not subject to pharmaceutical regulatory compliance.



- Telephone Support to Isolate and Resolve Hardware Problems – included without charge
- At-Your-Site Service with consumables used during repair
- All Off-Site Instrument Repair Services
- Annual On-Site Preventive Maintenance

#### Environmental Bundle

For the environmental, clinical and other laboratories that depend on mass spectrometers for sample analysis.



- Telephone Support to Isolate and Resolve Hardware Problems – included without charge
- At-Your-Site Service with consumables used during repair
- All Off-Site Instrument Repair Services
- Annual On-Site Preventive Maintenance
- Annual Mass Spectrometer Ion Source Cleaning