



**Agilent OpenLAB  
Chromatography Data  
System (CDS) A.02.02**

**Supported Instruments and  
Firmware Guide  
for  
ChemStation Edition C.01.07, or  
EZChrom Edition A.04.07**



**Agilent Technologies**

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This guide is valid for Agilent OpenLAB Chromatography Data System (CDS) version A.02.02

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## OpenLAB CDS Driver Information

The table below shows an overview of the Agilent driver packages that are delivered with OpenLAB CDS A.02.02.

### OpenLAB CDS ChemStation Edition C.01.07

	<b>RC.NET Driver Package</b>
LC and CE Drivers	A.02.10
218/SD1 Prep LC Driver	A.01.02
ELSD driver	1.2
GC Drivers	A.02.05 78xx Driver ver. 5.05 68xx Driver ver. 6.25
490 µGC driver	1.9.0
LC/MS Driver	Built into software
Waters LC	4.2.0.0

### OpenLAB CDS EZChrom Edition A.04.07

	<b>Driver Package</b>
OpenLAB CDS EZChrom Edition - Agilent LC	A.02.10
OpenLAB CDS EZChrom Edition - Agilent ELSD	1.2
OpenLAB CDS EZChrom Edition - Agilent Classic GC	1.081.0
OpenLAB CDS EZChrom Edition - Agilent GC	A.02.05
OpenLAB CDS EZChrom Edition - Agilent 490 Micro GC	1.9.0
OpenLAB CDS EZChrom Edition - Agilent A/D	4.7.1.0
OpenLAB CDS EZChrom Edition - Alltech LC Detectors	4.2.0.1
OpenLAB CDS EZChrom Edition - Hitachi ChromasterUltra RS	3.05
OpenLAB CDS EZChrom Edition - Hitachi CM	5.65
OpenLAB CDS EZChrom Edition - Hitachi LaChrom	1.02
OpenLAB CDS EZChrom Edition - Hitachi LC	4.69
OpenLAB CDS EZChrom Edition - Hitachi Primaide	1.64
OpenLAB CDS EZChrom Edition - PE Nelson A/D	4.6.0.1
OpenLAB CDS EZChrom Edition - Perkin Elmer GC	4.2.0.1
OpenLAB CDS EZChrom Edition - Perkin Elmer LC	4.2.0.1
OpenLAB CDS EZChrom Edition - Shimadzu LC RCNet	1.1.0.16552
OpenLAB CDS EZChrom Edition - Varian GC	4.6.0.1
OpenLAB CDS EZChrom Edition - VICI Valve	4.6.0.1
OpenLAB CDS EZChrom Edition - Waters LC	4.2.0.1
OpenLAB CDS Print Server	1.4.4.0

## Minimum required Firmware

Agilent recommends always using the most recent firmware revisions which include latest firmware features and improvements. Drivers are forward compatible with respect to firmware, i.e. the firmware can be updated without the need of updating the driver or CDS.

In the following sections this guide summarizes the instruments and modules for which drivers compatible with OpenLAB CDS A.02.02 are available from Agilent, and list the minimum required firmware.

The instrument driver and firmware versions listed have been verified to work with OpenLAB CDS ChemStation Edition version C.01.07 and EZChrom Edition version A.04.07. This guide should only be used for these CDS versions.

## Operating Systems

Unless otherwise noted all instrument drivers are supported on

- **Windows 7 SP1** Enterprise and Professional (**32-bit / 64-bit**)
- **Windows 8.1** Enterprise and Professional (**32-bit / 64-bit**)

For support information on server operating systems please see the HW/SW requirement guide.

## Driver types

Agilent OpenLAB CDS drivers are based on the RC.NET architecture. Information in this guide refers to this driver type, unless otherwise noted.

Native “classic” drivers for legacy modules of the 1100 and 1200 HPLC series are still provided with OpenLAB CDS ChemStation Edition. These classic drivers cannot be run in the same instrument with RC.NET drivers. Combinations of modules in one instrument stack need to have one common driver class. Classic drivers compatible with OpenLAB CDS A.02.02 are listed at the end of this guide.

In addition for some instrument classes “Classic Plus” drivers are available with OpenLAB CDS ChemStation Edition (ELSD, CTC and Single Quad MS). The Classic Plus driver types can be combined with RC.NET drivers via their CIC ports.

# Instrument Communication Information - OpenLAB CDS EZChrom and ChemStation Editions

## NOTE

On Agilent Instrument Controllers (AICs), OpenLAB CDS ChemStation Edition exclusively supports instruments and modules connected via LAN. GPIB, RS232, USB or any converter are not supported on AICs.

## Instrument LAN Interface Card

Product	Hardware	Minimum required Firmware Revision	Notes
G1369C	LAN Interface card	B.06.40	CAN support for hosted modules/CAN slave (e.g. G1170A Universal Valve Drive)  SW 7 and SW 8 must be in the OFF position  10/100BaseT
G1369B	LAN Interface card	A.01.01	SW 7 and SW 8 must be in the OFF position  10/100BaseT
G1369A	LAN Interface card	A.01.10	1st version – firmware A.01.05 - Not Supported with GC and 35900E 2nd version – Board revision C.03.00 – firmware A.01.10 – Supported with 35900E and GC
J4100A	Jet Direct Card	K.08.32	10/100BaseT  Supported with ChemStation only

## GPIB Compatibility

Product	Minimum required Firmware Revision	Support Statement / Comments
82350B	I IO Library Suite 16.2 Update 3	ChemStation Only, not supported for GC instruments
82357B (USB / GPIB interface)	IO Library Suite 16.2 Update 3	Out of support
National Instruments IEEE-488 card		EZChrom Only



# Agilent HPLC/LC Firmware Information

## Introduction

For Agilent LC instruments the following RC.NET firmware revisions are recommended with Agilent OpenLAB CDS A.02.02 ChemStation Edition or EZChrom Edition:

Device	Firmware
Agilent 1100 Series, 1200 Series and 1200 Infinity	A.06.60
Agilent 1200 Series, 1200 Infinity and 1120 Compact LC	B.06.60
Agilent 1200 Infinity Hosted Modules	C.06.60
Agilent 1290 Infinity (some modules)	D.06.60
Agilent 1200 Series ELSD (G4218A)	1.4

For Details on the firmware revisions please refer to the [Release Note for Agilent LC and CE drivers Revision A.02.10](#).

Please Note that OpenLAB CDS A.02.02 also supports independent LC Driver releases later than A.02.10. If you want to use more recent driver revisions than A.02.10, please refer to the respective [Release Note for Agilent LC and CE drivers](#) delivered with the drivers.

For more information on downloading the latest Firmware, please refer to the Agilent website [LC Firmware News and Downloads](#) and [Firmware Update Tools & Procedures](#).

Some of the modules are supported with Firmware revisions lower than the ones listed in the table above. Please check the following pages for the minimum required firmware revision.

LC and CE Firmware revisions are grouped into sets for each module or system. Firmware sets include just the latest firmware of each module. The latest sets are 6.50, 6.30 and 6.10. Every firmware of one set is fully compatible with your CDS that supports this firmware set. Modules combined into one LC instrument always need to have firmware from the same set.

Firmware revisions within one set are compatible in all cases, even if lower than the minimum required firmware provided in the tables of this section. However, if one module uses a firmware revision lower than the specified Minimum Firmware Revision some functionality might not be supported.

### NOTE

Do not mix firmware revisions from one set with older or newer sets. Firmware is not tested across set borders.

## Supported HPLC / LC Modules and minimum required Firmware for OpenLAB CDS ChemStation and EZChrom Editions

### Agilent LC Sampling Systems

Product Number	Module Name	Supported by OpenLAB CDS Edition:		Minimum required Firmware Revision
		CS*	EZ**	
G1313A	1100 Series Standard Autosampler	Y	Y	A.06.10
G1329A	1100 Series Standard Autosampler	Y	Y	A.06.10
G1329B	1260 Infinity Standard Autosampler	Y	Y	A.06.10
G1367A	1100 Series Well-plate Sampler	Y	Y	A.06.32
G1367B	1200 Series High Performance Autosampler	Y	Y	A.06.32
G1367C	1200 Series High Performance Autosampler SL	Y	Y	A.06.32
G1367D	1200 Series High Performance Autosampler SL+	Y	Y	A.06.32
G1367E	1260 Infinity High Performance Autosampler	Y	Y	A.06.32
G1377A	1260 Infinity High Performance Micro Autosampler	Y	Y	A.06.12
G1389A	1100 Series Micro Thermostatted Autosampler	Y	Y	A.06.10
G2256A	1260 Infinity Sample Capacity Extension	Y	Y	n/a
G2258A	1260 Infinity Dual-Loop Autosampler	Y	Y	A.06.50
G2260A	1260 Infinity Preparative Autosampler (High flow)	Y	Y	A.06.50
G2261A	1100 Series Preparative Autosampler (Thermostatted )	Y	Y	A.06.32
G4226A	1290 Infinity Autosampler	Y	Y	A.06.32
G4303A	1260 Infinity SFC standard autosampler	Y	Y	A.06.54
G5667A	1260 Infinity Bio-inert Autosampler	Y	Y	A.06.32
G7167A/B	1260 Infinity Multisampler	Y	Y	D.06.60

\* CS: OpenLAB CDS ChemStation Edition

\*\* EZ: OpenLAB CDS EZChrom Edition

### CTC PAL Autosamplers (Agilent and CTC) with LC

Product Number	Module Name	Supported by OpenLAB CDS		Minimum required Firmware Revision	
		CS*	EZ**	CTC Firmware	RC.NET
G4277A	Agilent 1290 Infinity LC Injector HTS	Y	Y	4.x.x	B.01.04/B.01.05
G4278A	Agilent 1290 Infinity LC Injector HTC	Y	Y	4.x.x	B.01.04/B.01.05
G4270-CTC	CTC Analytics HTC PAL Injection System <sup>1</sup>	Y	Y	2-5-2	B.01.04/B.01.05
G4271-CTC	CTC Analytics HTS PAL Injection System <sup>1</sup>	Y	Y	2-5-2	B.01.04/B.01.05

\* CS: OpenLAB CDS ChemStation Edition

\*\* EZ: OpenLAB CDS EZChrom Edition

1 RS-232 communication only

## Agilent LC – Pumps

Product Number	Module Name	Supported by OpenLAB CDS		Minimum required Firmware Revision
		CS*	EZ**	
G1310A	1100 Series Isocratic Pump	Y	Y	A.06.10
G1310B	1260 Infinity Isocratic Pump	Y	Y	A.06.32
G1311A	1100 Series Quaternary Pump <sup>1</sup>	Y	Y	A.06.10
G1311B	1260 Infinity Quaternary Pump <sup>1</sup>	Y	Y	A.06.32
G1311C	1260 Infinity Quaternary Pump VL <sup>1</sup>	Y	Y	A.06.32
G1312A	1260 Infinity Binary Pump <sup>1</sup>	Y	Y	A.06.10
G1312B	1260 Infinity Binary Pump SL <sup>1</sup>	Y	Y	A.06.10
G1312C	1260 Infinity Binary Pump VL <sup>1</sup>	Y	Y	A.06.32
G1361A	1260 Infinity Preparative Pump Cluster with up to 4x G1361A	Y	Y	A.06.50
G1376A	1260 Infinity Capillary Pump	Y	Y	A.06.10
G2225A G2226A	1260 Infinity Nanoflow Pump	Y	Y	A.06.10
G4204A	1290 Quaternary Pump <sup>1</sup>	Y	Y	B.06.50
G4220A	1290 Infinity Binary Pump <sup>1</sup>	Y	Y	B.06.23
G4220B	1290 Infinity Binary Pump VL <sup>1</sup>	Y	Y	B.06.43
G4302A	1260 Infinity SFC Binary Pump <sup>1</sup>	Y	Y	A.06.32
G5611A	1260 Infinity Bio-inert Quaternary Pump <sup>1</sup>	Y	Y	A.06.32

<sup>1</sup> Pump valve clusters are possible for marked pumps with up to 2 valves of type G1160A and/or G1170A

\*CS: OpenLAB CDS ChemStation Edition

\*\*EZ: OpenLAB CDS EZChrom Edition

## Agilent LC – Column Compartments

Product Number	Module Name	Supported by OpenLAB CDS		Minimum required Firmware Revision
		CS*	EZ**	
G1316A	1260 Infinity Column Compartment (Thermostatted)	Y	Y <sup>1</sup>	A.06.10
G1316B	1200 Series Column Compartment SL	Y	Y <sup>1</sup>	A.06.10
G1316C	1290 Infinity Column Compartment (Thermostatted) <sup>2</sup>	Y	Y	A.06.14

<sup>2</sup> Cluster with up to three G1316C with integrated 8pos/9port valves (products G4230A/B). Minimum two G1316C TCCs. The third TCC can be a G1316A, B or C. New 2/10 and 2/6 valves are not supported by EZChrom Edition

\* CS: OpenLAB CDS ChemStation Edition

\*\* EZ: OpenLAB CDS EZChrom Edition

1 Except G1316A#56 (or G1316B#56) micro valve control

## Agilent LC – Detectors

Product Number	Module Name	Supported by OpenLAB CDS		Minimum required Firmware Revision
		CS*	EZ**	
G1314A	1100 Series Variable Wavelength Detector	Y	Y	A.06.10
G1314B	1200 Series Variable Wavelength Detector	Y	Y	A.06.10
G1314C	1200 Series Variable Wavelength Detector	Y	Y	A.06.10
G1314D	1200 Series Variable Wavelength Detector	Y	Y	B.06.32
G1314E	1290 Infinity Variable wavelength Detector	Y	Y	B.06.32
G1314F	1260 Infinity Variable wavelength Detector	Y	Y	B.06.32
G1315A	1100 Series Diode Array Detector	Y	Y	A.06.10
G1315B	1200 Series Diode Array Detector	Y	Y	A.06.10
G1315C	1200 Series Diode Array Detector VL+	Y	Y	B.06.30
G1315D	1200 Series Diode Array Detector VL	Y	Y	B.06.30
G1365A	1100 Series Multiple Wavelength Detector	Y	Y	A.06.10
G1365B	1100 Series Multiple Wavelength Detector	Y	Y	A.06.10
G1365C	1260 Infinity Multiple Wavelength Detector	Y	Y	B.06.30
G1365D	1260 Infinity Multiple Wavelength Detector VL	Y	Y	B.06.30
G1321A	1100 Series Fluorescence Detector (FLD)	Y	Y	A.06.10
G1321B	1260 Infinity Fluorescence Detector	Y	Y	A.06.32
G1321C	1260 Infinity Fluorescence Detector	Y	Y	A.06.54
G1362A	1260 Infinity Refractive Index Detector	Y	Y	A.06.10
G4212A	1290 Infinity Diode Array Detector	Y	Y	B.06.30
G4212B	1260 Infinity Diode Array Detector	Y	Y	B.06.30
HDR-DAD Cluster	2x G4212A or 2x G4212B, or a combination of 1x G4212A and 1x G4212B	Y	Y	B.06.57
G4218A	1260 Infinity Evaporative Light Scattering Detector	Y <sup>1</sup>	Y <sup>1</sup>	1.4 Classic Plus (English Driver only)
G4260A	1260 Infinity 380 Evaporative Light Scattering Detector	Y <sup>1</sup>	Y <sup>1</sup>	25.0
G4261A	1290 Infinity 385 Evaporative Light Scattering Detector	Y <sup>1</sup>	Y <sup>1</sup>	25.0
G4260B	1260 Infinity Evaporative Light Scattering Detector	Y <sup>1</sup>	Y <sup>1</sup>	30.38
G4261B	1290 Infinity Evaporative Light Scattering Detector	Y <sup>1</sup>	Y <sup>1</sup>	30.38

\* CS: OpenLAB CDS ChemStation Edition

\*\* EZ: OpenLAB CDS EZChrom Edition

1 NOT localized for Japanese and Chinese, not supported on AIC

**Agilent LC – Quick Change Valves**

Product Number	Module Name	Supported by OpenLAB CDS		Minimum required Firmware Revision
		CS*	EZ**	
G1157A	1200 Series 2 Position / 10 Port Valve	Y	Y	A.06.02
G1158A	1200 Series 2 Position / 6 Port Valve	Y	Y	A.06.02
G1158B	1200 Series 2 Position / 6 Port Valve (600bar)	Y	Y	A.06.02
G1159A	1200 Series 6 Position Selection Valve	Y	Y	A.06.02
G1160A	1100 Series Multiple Purpose Switching Valve (12Position / 13 Port)	Y	Y	A.06.02
G1162A	1200 Series 2 Position/ 6 Port Micro Valve	Y	No	A.06.02
G1163A	1200 Series 2 Position/ 10 Port Micro Valve	Y	No	A.06.02
G1170A	1290 Infinity Valve Drive	Y	Y	Master/Slave B.06.40/C.06.40

\* CS: OpenLAB CDS ChemStation Edition

\*\* EZ: OpenLAB CDS EZChrom Edition

**Agilent LC – Other Module types**

Product Number	Module Name	Supported by OpenLAB CDS		Minimum required Firmware Revision
		CS*	EZ**	
G1390A	1100 Series Universal Interface Box (UIB)	Y	Y	A.06.02
G1390B	1200 Infinity Series Universal Interface Box II	Y	Y	Master/Slave B.06.53/C.06.53
G4227A	1290 Infinity Flexible Cube	Y	Y	Master/Slave B.06.52/C.06.52
G2229A	1260 Infinity Nanoflow LC System	Y	Y	
G1323B	1100 Series Handheld Control Module	Y	n/a	
G4208A	1200 Infinity Series Instant Pilot	Y	n/a	
G1364A	1100 Series Automatic Fraction Collector <sup>1</sup>	Y	Y	A.06.53
G1364B	1260 Infinity Fraction Collector (preparative-scale) <sup>1</sup>	Y	Y	A.06.53
G1364C	1260 Infinity Fraction Collector (analytical-scale) <sup>1</sup>	Y	Y	A.06.53
G1364D	1100 Series Micro Fraction Collector	Y	Y	A.06.53
G5664A	1260 Infinity Bio-inert fraction collector AS <sup>1</sup>	Y	Y	A.06.53
G4301A	1260 Infinity Analytical SFC System	Y	Y	A.03.07

<sup>1</sup> Any combination of up to three G1364A/B/C or G5664A plus a fourth G1364A/B/C or G5664A for recovery can be clustered. Multiple single Fraction Collectors are not supported.

## Agilent 1120 Compact LC Systems

Product Number	Module Name	Communications	Supported by OpenLAB CDS		Minimum required Firmware Revision
			CS*	EZ compact	
G4286A	1120 Compact LC, Isocratic pump	TCP/IP	Y	Y	B.06.50
G4287A	1120 compact LC, Isocratic with Oven and ALS	TCP/IP	Y	Y	B.06.50
G4288A	1120 Compact LC, Gradient	TCP/IP	Y	Y	B.06.50
G4289A	1120 Compact LC, Gradient with oven	TCP/IP	Y	Y	B.06.50
G4290A	1120 Compact LC, Gradient with oven and ALS	TCP/IP	Y	Y	B.06.50

\* CS: OpenLAB CDS ChemStation Edition

\*\* EZ compact : OpenLAB CDS EZChrom Edition Compact

## Agilent 1220 Infinity LC Systems

### NOTE

For OpenLAB CDS EZChrom Edition these instruments are only configurable under the instrument type "Agilent Compact LC". They can be combined with modules that are available under the instrument type "Agilent Compact LC" only. Please see Page 38 for more detail.

Product Number	Module Name	Supported by OpenLAB CDS		Minimum required Firmware Revision
		CS*	EZ compact**	
G4286B	1220 Infinity LC System Isocratic, Man. Inj., VWD, 600 bar	Y	Y	B.06.50
G4287B	1220 Infinity LC Isocratic, ALS, TCC, VWD, 600 bar	Y	Y	B.06.50
G4288B	1220 Infinity LC Gradient, Man. Inj., VWD, 600 bar	Y	Y	B.06.50
G4289B	1220 Infinity LC Gradient, ALS, TCC, VWD, 600 bar	Y	Y	B.06.50
G4290B	1220 Infinity LC Gradient, ALS, Man. Inj., TCC, VWD, 600 bar	Y	Y	B.06.50
G4291B	1220 Infinity LC Isocratic, Man. Inj., TCC, VWD, 600 bar	Y	Y	B.06.50
G4292B	1220 Infinity LC Isocratic, ALS, VWD, 600 bar	Y	Y	B.06.50
G4293B	1220 Infinity LC Gradient, ALS, VWD, 600 bar	Y	Y	B.06.50
G4294B	1220 Infinity LC Gradient, ALS, TCC, DAD, 600 bar	Y	Y	B.06.50
G4288C	1220 Infinity LC System VL, Gradient, Man. Inj. VWD, 400 bar	Y	Y	B.06.50
G4289C	1220 Infinity LC System VL, Gradient, Man. Inj. VWD, 400 bar	Y	Y	B.06.50
G4290C	1220 Infinity LC System VL, Gradient, ALS, TCC, VWD, 400 bar	Y	Y	B.06.50
G4293C	1220 Infinity LC System VL, Gradient, ALS, VWD, 400 bar	Y	Y	B.06.50

\* CS: OpenLAB CDS ChemStation Edition

\*\* EZ compact : OpenLAB CDS EZChrom Edition Compact

**Agilent 218/SD1 PrepLC Driver**

Product Number	Module Name	Communications	Supported by OpenLAB CDS		Minimum required Firmware Revision
			CS*	EZ**	
Agilent 210	Pump	RS232	Y	No	1.73 rev C
Agilent 218	Pump	RS232	Y	No	1.1 rev B
Agilent SD1	Pump	RS232	Y	No	2.2
Agilent 325	UV/VIS Detector	LAN	Y	No	2.07
Agilent 410	Autosampler	RS232	Y	No	2.07
Agilent 440	Fraction Collector	RS232	Y	No	1.31

\*CS: OpenLAB CDS ChemStation Edition

\*\*EZ: OpenLAB CDS EZChrom Edition

## Agilent Driver for LC/MS

Supported for OpenLAB CDS ChemStation Edition only.

**NOTE**

G6110A, G6120A, G6130A, G6140A, G6120B, G6130B, and G6150B are not supported on Russian ChemStation

Model	Module Type	Supported Firmware	Supported Driver Type	Communications
G6110A	6100 Series Single Quadrupole LC/MS System	3.02.42	Classic Plus	LAN
G6120A	6100 Series Single Quadrupole LC/MS System	3.02.42	Classic Plus	LAN
G6130A	6100 Series Single Quadrupole LC/MS System	3.02.42	Classic Plus	LAN
G6140A	6100 Series Single Quadrupole LC/MS System	3.02.42	Classic Plus	LAN
G6120B	6100 Series Single Quadrupole LC/MS System	3.02.42	Classic Plus	LAN
G6130B	6100 Series Single Quadrupole LC/MS System	3.02.42	Classic Plus	LAN
G6150B	6100 Series Single Quadrupole LC/MS System	3.02.42	Classic Plus	LAN
G1956A	MS Detector for 1100/1200 LC	Not Supported	Not Supported	n/a
G1956B	MS Detector for 1100/1200 LC	Not Supported	Not Supported	n/a
G7100	CE/MS <sup>1</sup>	B.06.26	Only when configured as CE-MS system, workstation and networked workstation only.	

<sup>1</sup> When OpenLAB CDS ChemStation Edition is used to control the Agilent LC/MS, in conjunction with the Agilent 3D Capillary Electrophoresis system, no *additional* instrument is supported on the PC system (the one PC controls only the CE and MS system).



## Agilent CE Firmware Information

Supported for OpenLAB CDS ChemStation Edition only.

### Agilent Capillary Electrophoresis Driver

Product Number	Module Name	Supported by OpenLAB CDS		Minimum required Firmware Revision
		CS*	EZ**	
G1600A	Capillary Electrophoresis I (Mainframe)	No	No	
G7150A	G7100 Capillary Electrophoresis II <sup>1</sup>	Y	No	B.06.26
	Agilent G7100 CE/MS <sup>2</sup>	Y	No	B.06.25
G7151A	Diode Array Detector for CE II	Y	No	B.06.25

- 1 When OpenLAB CDS ChemStation Edition is used to control an Agilent 3D Capillary Electrophoresis system, no additional instruments are supported on the PC system.
- 2 When OpenLAB CDS ChemStation Edition is used to control the Agilent LC/MS, in conjunction with the Agilent 3D Capillary Electrophoresis system, no additional instruments is supported on the PC system (the one PC controls only the CE and MS system).

## Agilent Analog-Digital Converter Information

### Agilent A/D Converter

Instrument	Supported by OpenLAB CDS		Supported Firmware Version (minimum)	Communications
	CS*	EZ**		
Agilent 35900E Dual Channel Interface	Y	Y	E.01.02	TCP/IP , LAN only
Agilent SS420X	No	Y		RS-232
35900E Series II	Y	Y	E.02.04	

## Agilent GC Firmware Information – OpenLAB CDS

### Agilent GC

Product Number	Instrument name	Supported by OpenLAB CDS		Supported Firmware Version (minimum)	Notes
		CS*	EZ**		
G3440A G3445A	7890A	Y	Y	A.01.16	
G3440B G3445B	7890B	Y	Y	B.02.03.1	
G4350A	7820A	Y	Y	A.01.12.005	RTL, CFT, and method transfer are not supported
G1530N G1540N	6890N	Y <sup>2</sup>	Y <sup>3</sup>	N.06.07	RC.Net driver support only.
G1530A G1540A	6890A 6890Plus	Y <sup>2</sup>	Y <sup>3</sup>	A.03.08	RC.NET driver support only.
G2630A	6850 Serial # >= US10243001	Y <sup>2</sup>	Y <sup>3</sup>	A.06.02	RC.NET driver support only.
G2630A	6850 Serial # <= US00003200	Y <sup>2</sup>	Y <sup>3</sup>	A.03.07	RC.NET driver support only.
G2629A	6850 Handheld Controller	Y <sup>2</sup>	Y <sup>3</sup>	A.05.06	For 7683A/B
	5890 Series II	No	No	A.03.02	Out of Support. <sup>4</sup>
G3581A	490 Micro GC	Y	Y	2.20 build 19606	TCP-IP
G3582A	490 Micro GC Analyzers	Y	Y	2.20 build 19606	TCP-IP
Varian	CP-4900 Micro-GC	No	Y	1.40 build 45	TCP-IP
Varian	490-GC Micro-GC	No	Y	1.40 build 45	TCP-IP

<sup>2</sup> **ChemStation:** The GC classic driver is not supported. It is no longer possible to configure a 68xx GC with the classic driver.

After an upgrade, the 68xx series GC must be re-configured to use the RC.NET driver in Agilent OpenLAB Control Panel. GCs using GPIB must update to LAN. There will be no new updates or hotfixes for the 68xx GC Classic driver.

<sup>3</sup> **EZChrom:** The Classic Agilent 6890 GC driver is no longer supported and cannot be used to acquire data. The Classic Agilent 6890 GC driver is only available to reprocess data previously created with a 6890 GC. There will be no new updates or hotfixes for the Classic Agilent 6890 GC driver.

<sup>4</sup> **5890 GC** not supported in OpenLAB CDS ChemStation and EZChrom Editions

The 5890 driver is not tested and no longer supported. There will be no new updates or hotfixes for the 5890 GC driver.

In OpenLAB CDS EZChrom Edition, the 5890 driver is only available to reprocess data previously created with a 5890 GC

## ALS Summary (auto injector, tray and associated controller)

### 7650 ALS hardware:

Instrument	Model	Supported Firmware Version (minimum)	Notes
Injector	G4567A	A.10.02	

### 7693 ALS hardware

Instrument	Model	Supported Firmware Version (minimum)	Notes
7693 Injector	G4513A	A.10.09	
7693 Tray	G4514A	A.10.16	
BCR/Mixer	G4515A	A.10.05	EZChrom: Heating/Mixing Only
External Controller	G4516A	A.01.06	6890 only
6890Plus ALS card upgrade	G4517A	A.01.06	6890 only
LVI Syringe Carriage	G4521A	n/a	
Cooling Accessory	G4522A	n/a	
Tray with BCR/Mixer	G4520A	A.10.16	EZChrom: Heating/Mixing Only

### 7683B ALS hardware

Instrument	Model	Supported Firmware Version (minimum)	Notes
7683B Injector	G2913A	A.11.03	
7683B Tray	G2614A	A.02.01	
BCR/Mixer	G2615A	n/a	EZChrom: Mixing Only

### 7683A ALS hardware:

Instrument	Model	Supported Firmware Version (minimum)	Notes
7683A Injector	G2613A	A.10.07	
7683A Tray	G2614A	A.02.01	
BCR/Mixer	G2615A	n/a	EZChrom: Mixing Only

## Headspace support with GC

Instrument	Model	Supported Firmware Version (minimum)	Software Revision (minimum)	Notes
7697A Headspace	7697A	A.01.06	B.01.06	
G1888 Headspace	7694B / G1888	A.01.10	B.01.06	
Headspace	G1289B/ G1290B (7694B)	1.05		Out of Support
Headspace	G1883A (7694E)	1.12	--	Not Supported

## Control of PAL sampler with GC

Instrument	Model	Supported Firmware Version (minimum)	Software Revision	Notes
CTC Combi-Pal for Liquid and Headspace Injection (SPME Optional)	G6500-CTC	Agilent 2.6.8 or 4.3.0	B.01.04	
CTC Combi-Pal 80 cm for Liquid Injection (SPME, Headspace Optional)	G6501-CTC	Agilent 2.6.8 or 4.3.0	B.01.04	
CTC Combi-Pal120 cm for Liquid Injection (SPME, Headspace Optional)	G6509-CTC	Agilent 2.6.8 or 4.3.0	B.01.04	
CTC GC-Pal for Liquid Injection (SPME Optional)	G6502-CTC	Agilent 2.6.8 or 4.3.0	B.01.04	
Agilent GC Sampler 80 cm for Liquid Injection (SPME, Headspace Optional)	G6501B	Agilent 4.3.0	B.01.04	
Agilent GC Injector 80 cm for Liquid Injection (SPME Optional)	G6502B	Agilent 4.3.0	B.01.04 B.01.04	
Agilent GC Sampler 120 cm for Liquid Injection (SPME, Headspace Optional)	G6509B	Agilent 4.3.0	B.01.04	

## Non-Agilent LC Devices supported by OpenLAB CDS

**NOTE**

The drivers listed in this section are supported by OpenLAB CDS EZChrom Edition only, unless stated otherwise.

### Alltech Associates

#### LC Detectors

Module Type	Module Names	Communications	Supported Firmware Versions (minimum)	Notes
Detectors	ELSD-2000	RS-232C	-	No longer supported with OpenLAB CDS
Detectors	CD-650	RS-232C	-	

### Hitachi

#### LaChrom LC

Module Type	Module Names	Communication	Supported Firmware Versions (minimum)	Notes
System	D-7000 Interface Module (IFM)	GPIB	N/A	
AID	D7000	(through IFM)	810-7014-00	
Pump	L7100	(through IFM)	810-7810-00	
Autosampler	L7200	(through IFM)	810-8300-04	
Autosampler	L7250	(through IFM)	810-8350-05	
Oven	L7300	(through IFM)	810-7760-03	IE 8, Win 7 32-bit only
Detector	L7400	(through IFM)	810-8200-04	DEP Off, UAC Off
Detector	L7420	(through IFM)	810-8250-02	
Detector	L7450	GPIB	N/A	
Detector	L7455	GPIB	810-4853-01	
Detector	L7480	(through IFM)	810-8100-02	
Detector	L7485	(through IFM)	810-7064-01	

### LaChrom Elite LC

Module Type	Module Names	Communications	Supported Firmware Versions (minimum)	Notes
System	USB Interface Board (IFB)	USB	890-8190-01 or 891-8190-00	
Pump	L-2100, L-2130	(through IFB)	890-8110-02	
Autosampler	L-2200	(through IFB)	890-8121-00 or 890-8120-03	
Oven	L-2300	(through IFB)	890-8130-02	
Oven	L-2350	(through IFB)	890-8150-00	
Detector	L-2400	(through IFB)	890-8140-02	IE 8, Win 7 only
Detector	L-2420	(through IFB)	890-8142-00	
Detector	L2450	(through IFB)	890-8145-00	
Detector	L-2455	(through IFB)	890-8146-00	
Detector	L2480	(through IFB)	890-8148-00	
Detector	L-2485	(through IFB)	890-8149-00	
Detector	L-2490	(through IFB)	1.01	
Detector	A/D	(through IFB)	890-8165-00	

### LaChrom Ultra LC

Module Type	Module Names	Communications	Supported Firmware Versions (minimum)	Notes
System	USB Interface Board (IFB)	USB	891-8190-00	
Pump	L-2160U	(through IFB)	891-8110-02	
Autosampler	L-2200U	(through IFB)	891-8120-03 or 891-8128-00	IE 8, Win 7 only
Detector	L-2400U	(through IFB)	891-8140-02	
Detector	L-2420U	(through IFB)	891-8142-00	
Detector	L-2455U	(through IFB)	891-8145-00	
Detector	L-2485U	(through IFB)	891-8148-00	

**Non-Agilent LC Devices  
Supported by EZChrom Edition**

**Chromaster LC**

<b>Module Type</b>	<b>Module Names</b>	<b>Communications</b>	<b>Supported Firmware Versions (minimum)</b>	<b>Notes</b>
System	Interface Control Board (IFC)	USB	892-8190-02	
Pump	Chromaster 5110	(through IFC)	892-8110-02	
Pump	Chromaster 5160	(through IFC)	892-8116-00	
Autosampler	Chromaster 5210	(through IFC)	892-8120-01	
Autosampler	Chromaster 5260	(through IFC)	892-8126-00	
Oven	Chromaster 5310	(through IFC)	892-8130-00	IE 8, Win 7 only
Detector	Chromaster 5410	(through IFC)	892-8140-00	
Detector	Chromaster 5420	(through IFC)	892-8142-00	
Detector	Chromaster 5430	(through IFC)	892-8145-01	
Detector	Chromaster 5440	(through IFC)	892-8148-00	
Detector	Chromaster 5450	(through IFC)	2.00	
Detector	Analog Input Device	(through IFC)	892-8165-00	

**Primaide LC**

<b>Module Type</b>	<b>Module Names</b>	<b>Communications</b>	<b>Supported Firmware Versions (minimum)</b>	<b>Notes</b>
System	USB Interface Board (IFB)	USB	891-8190-00	
Pump	Primaide 1110	(Through IFB)	895-8110-00	
Autosampler	Primaide 1210	(Through IFB)	895-8121-00	
Oven	Primaide 1310	(Through IFB)	895-8130-00	IE 8, Win 7 only
Detector	Primaide 1410	(Through IFB)	895-8140-00	
Detector	Primaide 1430	(Through IFB)	895-8145-00	
Detector	Analog Input Device	(Through IFB)	892-8165-00	



### Chromaster Ultra Rs LC

Module Type	Module Names	Communications	Supported Firmware Versions (minimum)	Notes
System	Interface Control Board (IFC)	USB	889-8190-01	not compatible with IFC of Chromaster series.
Binary Pump	Chromaster 6170	(through IFC)	889-8110-01 889-8111-01(sub CPU 1) 889-8112-00(sub CPU 2/3)	
Autosampler	Chromaster 6270	(through IFC)	889-8120-00	
Oven	Chromaster 6310	(through IFC)	889-8130-00	
Detector	Chromaster 6420	(through IFC)	889-8142-00	
Detector	Chromaster 6430	(through IFC)	889-8145-00 889-8146-00 (sub CPU)	
Detector	Analog Input Device	(through IFC)	892-8165-00	
Detector	Chromaster 6440 FL	(through IFC)	889-8148-00 or later	

## PerkinElmer

### Series 200LC

Module Type	Module Names	Communications	Supported Firmware Versions (minimum)	Notes
Autosampler	Series 200, ISS-200 Autosampler	RS-232	1.08	Win 7, Win 8, Win 2008 R2 TS
Pump	Series 200 pump	RS-232	2.43	
Detectors	Series 200 UV detector	RS-232	1.0	

### Nelson Interfaces

Module Type	Module Names	Communications	Supported Firmware Versions (minimum)	Notes
A/D	940, 941A	RS-232	2.3	Win 7, Win 8, Win 2008 R2 TS
A/D	760	GPIB	N/A	
A/D	950/950A	RS-232 or GPIB	2.7	
	960/960A 970/970A	RS-232 or GPIB	2.4	
	NCI 901/902	RS-232 or GPIB	3.4	

## Shimadzu

### Prominence LC (LC-20) and Nexera LC (LC-30) RC.Net Driver

Module Type	Module Names	Communications	Supported Firmware Versions (minimum)	Notes
System Controller	CBM-20A / CBM-20Alite	LAN	2.40 or later *	
Pump	LC-30AD	LAN	3.00 or later	
	LC-20AD	LAN	1.12 or later	
	LC-20AT	LAN	1.10 or later	
Column Oven	CTO-30A, CTO-30AS CTO-20A, CTO-20AC	LAN	3.00 or later 3.00 or later 1.07 or later	Win 7 only
Autosampler	SIL-30AC / SIL-30ACMP SIL-20A / SIL-20AC (HT, UFLC) Rack Changer II Rack Changer, Rack Changer C	LAN	3.00 or later 1.25 or later 2.00 or later 1.11 or later	
Subcontroller	Subcontroller VP (Option Box VP)	LAN	5.22 or later	
Detector	SPD-M30A SPD-20A, SPD-20AV RF-20A, RF-20AXS Analog input board (PC-55N)	LAN	3.02 or later 1.11 or later 1.10 or later -	

\* If 2 PDA detectors are connected to 1 AIC or Workstation, upgrade to version 2.60.

## Waters

### Agilent Alliance driver

Agilent is planning to provide a driver for Waters Alliance/e-Alliance compatible with this revision under product number M8239AA.

Please check the data sheet and release documentation for M8239AA for compatibility information with this version of the CDS.

#### NOTE

Only data analysis is supported with the Agilent Alliance driver.

The Agilent Alliance driver is installed automatically when you install OpenLAB CDS EZChrom Edition and is installed for backwards compatibility and data review purposes only.

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## Waters – Drivers supported by ChemStation Edition and EZChrom Edition

For the latest information on Water Acquity drivers, please refer to the Waters Agilent OpenLAB Chromatography Data System (CDS) *ACQUITY Drivers Installation and User's Guide*.

## Non-Agilent GC Devices supported by OpenLAB CDS EZChrom Edition

### PerkinElmer

#### Autosystem XL

Module Type	Module Names	Communication	Supported Firmware Versions (minimum)	Notes
GC	Autosystem XL	RS-232	3.660	
Inlets	Capillary, Programmable On-Column - Inlet Pgm Mode, Programmable On-Column - Oven Track Mode, Programmable Split/Splitless - Inlet Pgm Mode, Programmable Split/Splitless - Oven Track Mode	(Through GC)	N/A	Win 7, Win 8, Win 2008 R2 TS
Detectors	FID, ECD, TCD, PID	(Through GC)	N/A	
Autosampler	(Built-in)	(Through GC)	3.70	
Other	PPC	(Through GC)	2.24	

### Varian

#### CP-3800

Module Type	Module Names	Communication	Supported Firmware Versions (minimum)	Notes
GC	CP3800	TCP/IP (BNC type)	3.3.5D	
Detector	FID, ECD, TCD, TSD, uTCD, PFPD	(Through GC)	N/A	Win 7, Win 8, Win 2008 R2 TS
Autosampler	CP8200, CP8400, CP8410	(Through GC)	N/A	

#### 3900-GC

Module Type	Module Names	Communication	Supported Firmware Versions (minimum)	Notes
GC	Integrated GC	TCP/IP	6.18	
Inlets	Split/Splitless, On Column	(Through GC)	N/A	Win 7, Win 8, Win 2008 R2 TS
Detector	FID, TCD	(Through GC)	N/A	
Autosampler	CP8200, CP8400, CP8410	(Through GC)	N/A	

### Micro-GC

Module Names	Communication	Supported Firmware Versions (minimum)	Notes
490-GC Micro-GC	TCP-IP	1.40 build 45	
CP-4900 Micro-GC	TCP-IP	1.40 build 45	Win 7, Win 8, Win 2008 R2 TS
CP-2002(P), CP2003(P)	RS-232	1.1, 1.2	
CP-2003 Quad	2 RS-232 ports	1.22	

## Valco

### Valves

Module Type	Module Names	Communication	Supported Firmware Versions (minimum)	Notes
Valve	EMHCA-CE	RS-232	N/A	Win 7, Win 8, Win 2008 R2 Terminal Services
Valve	EMTCA-CE	RS-232	N/A	
Valve	EMHA-CE	RS-232	N/A	

## OpenLAB CDS Compact and VL

### OpenLAB CDS VL

Both OpenLAB CDS EZChrom Edition and ChemStation Edition offer a VL version. The VL versions offer the full functionality of the Workstation configuration while restricting instrument control. The OpenLAB CDS VL license allows the control of one LC or GC instrument only, and restricts the use of the instruments to standard modules. The supported modules and firmware options for VL Systems are shown in the following sections of this document.

A summary of the VL System is described below:

#### OpenLAB CDS ChemStation Edition VL rev. C.01.07

- Supported with Workstation configuration only.
- Offers full functionality of OpenLAB CDS ChemStation Edition software.
- Allows control of one 1120 LC or 1220 LC system with Instrument type “Agilent 1220 LC System”. Control of additional 1260 Infinity LC modules is supported with the exception of modular pumps.
- Allows control of one full 1260 LC instrument (selected modules) or 1220 LC System with new instrument type: “Agilent LC Core System”.
- Allows control of one 7820A GC, one 490Micro GC, one Varian 490-GC Micro-GC, or one Varian 4900 Micro GC.
- LC-MS configurations are not supported

#### OpenLAB CDS EZChrom VL Edition rev. A.04.07

- Supported with Workstation configuration only.
- Offers full functionality of OpenLAB CDS EZChrom Edition software.
- Allows control of one full 1260 LC (selected modules) or 1220 LC System with new instrument type: “Agilent LC Core System” .
- Allows control of one 7820A GC, one 490Micro GC, one Varian 490-GC Micro-GC, or one Varian 4900 Micro GC.

### OpenLAB CDS EZChrom Edition Compact

OpenLAB CDS EZChrom Edition offers a Compact version. It has restrictions in the functionality of the Workstation configuration and instrument control. The supported modules and firmware options for Compact are shown in the following sections of this document.

It provides total control of a maximum of two instruments of :

- Agilent 1120 and 1220 LC
- 7820A GC
- Agilent 490 Micro GC, 490-GC Micro-GC, and CP-4900 Micro-GC

## Supported modules for OpenLAB CDS VL Systems

For latest FW information, please refer to the respective driver release notes, or to the tables for the OpenLAB CDS full version in this guide.

### A. Control of Agilent GC Hardware, using the respective GC instrument type

**Table 1** Agilent LC Core System modules

Module Name	Product Number
7820A	G4350B (No Software Add-on support)
Agilent 490 Micro GC	G3581A
CP-4900 Micro-GC	Varian
490-GC Micro-GC	Varian

### B. Control of one 1260 Infinity LC instrument, or one 1220 Infinity LC System using instrument type "Agilent LC Core System".

The following modules may be part of th Infinity LC instrument:

**Table 2** Agilent LC Core System modules

Module Name	Product Number
1260 Isocratic Pump	G1310B
1260 Quaternary Pump	G1311B
1260 Quaternary Pump VL	G1311C
1260 Column Compartment	G1316A
1260 Manual Injector	G1328C
1260 Autosampler	G1329B, G7129A
Thermostat	G1330B
1260 DAD	G1315D, G1315C, G4212B
1260 MWD	G1365D (VL), G1365C
1260 VWD	G1314B (VL), G1314C, G1314F
1260 RID	G1362A
1260 FLD	G1321B, G1321C
1200 UIB II	G1390B
1220	G4286B, G4288B, G4290B, G4288C, G4290C, G4294B
1120	G4286AA, G4287AA, G4288AA, G4289AA, G4290AA

**C. ChemStation Edition only: Control of one 1120 Compact LC or 1220 Infinity LC system using Instrument type "Agilent 1220 LC System".**

**Table 3** OpenLAB CDS VL Compatibility with Agilent 1120 Compact LC

Product Number	Module Type
G4286A	1120 Compact LC, Isocratic
G4287A	1120 Compact LC Isocratic with Oven and ALS
G4288A	1120 Compact LC, Gradient
G4289A	1120 Compact LC , Gradient with oven
G4290A	1120 Compact LC Gradient with oven and ALS
G1321A	1100/1200 FLD
G1362A	1100/1200 RID
G4218A	1100/1200 ELSD
G4260A	ELSD 380 Detector
G4261A	ELSD 385 Detector
G4260B	ELSD 1260 Infinity Detector
G4261B	ELSD 1290 Detector

**Table 4** OpenLAB CDS VL compatibility with Agilent 1220 Infinity LC Systems

Product Number	Module Name
G4286B	1220 Infinity LC System Isocratic, Man. Inj., VWD, 600 bar
G4287B	1220 Infinity LC Isocratic, ALS, TCC, VWD, 600 bar
G4288B	1220 Infinity LC Gradient, Man. Inj., VWD, 600 bar
G4289B	1220 Infinity LC Gradient, ALS, TCC, VWD, 600 bar
G4290B	1220 Infinity LC Gradient, ALS, Man. Inj., TCC, VWD, 600 bar
G4291B	1220 Infinity LC Isocratic, Man. Inj., TCC, VWD, 600 bar
G4292B	1220 Infinity LC Isocratic, ALS, VWD, 600 bar
G4293B	1220 Infinity LC Gradient, ALS, VWD, 600 bar
G4294B	1220 Infinity LC Gradient, ALS, TCC, DAD, 600 bar
G4288C	1220 Infinity LC System VL, Gradient, Man. Inj. VWD, 400 bar
G4289C	1220 Infinity LC System VL, Gradient, Man. Inj. VWD, 400 bar
G4290C	1220 Infinity LC System VL, Gradient, ALS, TCC, VWD, 400 bar
G4293C	1220 Infinity LC System VL, Gradient, ALS, VWD, 400 bar



Supplemental 1260 Infinity LC modules may be connected to your 1220 Infinity LC system when controlled with a OpenLAB CDS VL ChemStation Edition. Table 5 provides a full list of compatible modules.

**Table 5** OpenLAB CDS VL compatibility with Agilent 1220 Infinity LC Systems – additional modules

Product Number	Module	Comment
G4286B	1220 Isocratic 600 bar	
G4287B	1220 Isocratic 600 bar with Oven and ALS	
G4288B	1220 Gradient 600 bar	
G4289B	1220 Gradient 600 bar with Oven	
G4290B	1220 Gradient 600 bar	
G4291B	1220 Isocratic 600 bar with Oven	
G4292B	1220 Isocratic 600 bar with ALS	
G4293B	1220 Gradient 600 bar with ALS	
G4294B	1220 Infinity Gradient LC System with DAD	TCP/IP
G4288C	1220 Infinity Gradient LC System VL (400 bar)	
G4289C	1220 Infinity Gradient LC System VL with ALS	
G4290C	1220 Infinity Gradient LC System VL with ALS	
G4293C	1220 Infinity Gradient LC System VL with ALS	
G1313A	1100 Series Standard Autosampler	
G1329A	1100 Series Standard Autosampler	
G1329B	1260 Infinity Standard Autosampler	
G1367A	1100 Series Well-plate sampler	
G1367B	1200 Series High Performance Autosampler	
G1367C	1200 Series High Performance Autosampler SL	
G1367D	1200 Series High Performance Autosampler SL+	
G1367E	1260 Infinity High Performance Autosampler	
G1368A	1100 Series Well-plate sampler	
G1373A	1100 Series Well-plate Autosampler Purge Kit	
G1377A	1260 Infinity Micro Autosampler	

**Table 5** OpenLAB CDS VL compatibility with Agilent 1220 Infinity LC Systems – additional modules [cont.]

Product Number	Module	Comment
G1389A	1100 Series Micro Thermostatted Autosampler	
G2256A	1260 Infinity Sample Capacity Extension	
G2258A	1260 Infinity Dual-Loop Autosampler	
G2260A	1260 Infinity Preparative Autosampler	
G2261A	1100 Series Preparative Autosampler	
G4226A	1290 High Performance ALS	
G4303A	1260 Infinity SFC standard autosampler	
G5667A	1260 Infinity Bio-inert Autosampler	
G4277A	Agilent 1290 Infinity LC Injector HTS	B.01.04 / B.01.05
G4278A	Agilent 1290 Infinity LC Injector HTC	B.01.04 / B.01.05
G4270-CTC	CTC Analytics HTC PAL Injection System	B.01.04 / B.01.05 RS-232 only
G4271-CTC	CTC Analytics HTS PAL Injection System	B.01.04 / B.01.05 RS-232 only
G1314A	1100 Series Variable Wavelength Detector	
G1314B	1200 Series Variable Wavelength Detector	
G1314C	1200 Series Variable Wavelength Detector	
G1314D	1200 Series Variable Wavelength Detector	
G1314E	1290 Infinity Variable Wavelength Detector	
G1314F	1260 Infinity Variable Wavelength Detector	
G1315A	1100 Series Diode Array Detector (DAD)	
G1315B	1200 Series Diode Array Detector (DAD)	
G1315C	1200 Series Diode Array Detector VL+	
G1315D	1200 Series Diode Array Detector VL	
G1365A	1100 Series Multiple Wavelength Detector	
G1365B	1100 Series Multiple Wavelength Detector	
G1365C	1260 Infinity Multiple Wavelength Detector	

**Table 5** OpenLAB CDS VL compatibility with Agilent 1220 Infinity LC Systems – additional modules [cont.]

Product Number	Module	Comment
G1365D	1260 Infinity Multiple Wavelength Detector VL	
G1321A	1100 Series Fluorescence Detector (FLD)	CAN Cable
G1321B	1260 Infinity Fluorescence Detector	
G1321C	1260 Infinity Fluorescence Detector	
G1362A	1260 Infinity Refractive Index Detector	CAN Cable
G4212A	1290 Infinity Diode Array Detector (DAD)	
G4212B	1260 Infinity Diode Array Detector (DAD)	
G4218A	1260 Infinity Evap. Light Scattering Detector (ELSD)	RS-232 NOT localized.
G4260A	1260 Infinity 380 ELSD Detector	RS-232 NOT localized.
G4261A	1260 Infinity 385 ELSD Detector	RS-232 NOT localized.
G4260B	1260 Infinity ELSD Detector	RS-232 NOT localized.
G4261B	1290 Infinity ELSD Detector	RS-232 NOT localized.
G1316A	1260 Infinity Column Compartment (Thermostatted)	EZ: Except G1316A#56 micro valve control
G1316B	1200 Series Column Compartment SL	EZ: Except G1316A#56 micro valve control
G1316C	1290 Infinity Column Compartment (Thermostatted)	
G1157A	1200 Series 2Pos/10Port Valve	
G1158A	1200 Series 2Pos/6Port Valve (Standard)	
G1158B	1200 Series 2 Pos/6 Port Valve (600bar)	
G1159A	1200 Series 6 Position Column Selector	
G1160A	1100 Series 12Pos/13Port Selection Valve	
G1162A	1200 Series 2Pos/6Port Valve (Micro)	

**Table 5** OpenLAB CDS VL compatibility with Agilent 1220 Infinity LC Systems – additional modules [cont.]

Product Number	Module	Comment
G1163A	1200 Series 2Pos/10Port Valve (Micro)	
G1170A	1290 Infinity Valve Drive	
G4230A/B	Valve Kits	
G1390A	1100 Series Universal Interface Box	
G1390B	1200 Infinity Universal Interface Box II	
G4227A	1290 Infinity Flexible Cube	
G1323B	1100 Series Local User Interface	
G4208A	1200 Series Instant Pilot	
G1364A	1100 Series Automatic Fraction Collector	
G1364B	1260 Infinity Fraction Collector	
G1364C	1260 Infinity Fraction Collector	
G1364D	1100 Series Micro Fraction Collector	

# Agilent OpenLAB CDS EZChrom Compact

## Support Information

### EZChrom Edition Compact Compatibility with GC Hardware

Model	Instrument	Supported Firmware Version (minimum)	Notes
G4350A	7820A	A.01.12.005	Software Add-on support
G3581A	490 Micro GC	2.20 build 19606	TCP/IP
Varian	CP-4900 Micro-GC	1.40 build 45	TCP/IP
Varian	490-GC Micro-GC	1.40 build 45	TCP/IP

### EZChrom Edition Compact with Agilent 1120 Compact LC

Product Number	Module Type	Supported Firmware Versions (minimum)	Communications
G4286A	1120 Isocratic	B.06.50	TCP/IP
G4287A	1120 Isocratic with Oven and ALS	B.06.50	TCP/IP
G4288A	1120 Gradient	B.06.50	TCP/IP
G4289A	1120 Gradient with oven	B.06.50	TCP/IP
G4290A	1120 Gradient with oven and ALS	B.06.50	TCP/IP
G1362A	1260 Infinity Refractive Index Detector	A.06.32	CAN Cable
G1321A	1260 Infinity Fluorescence Detector	A.06.32	CAN Cable
G4218A	1260 Infinity Evaporative Light Scattering Detector	V1.4	RS-232
G4260A	1260 Infinity Evaporative Light Scattering Detector	25.0	RS-232
G4261A	1290 Infinity 385 Evaporative Light Scattering Detector	25.0	RS-232
G4260B	1260 Infinity Evaporative Light Scattering Detector	30.38	RS-232
G4261B	1290 Infinity Evaporative Light Scattering Detector	30.38	RS-232 / LAN

## EZChrom Compact Edition with Agilent 1220 Infinity LC System

Using the “Agilent Compact LC” instrument type you will be able to configure 1100/1200/1260 Infinity/1290 modules along with the 1220 instrument. Please note that the number of hardware configurations is limited due to functionality incongruity. Please contact support before adding an 1100/1200/1260 Infinity/1290 module to an Agilent 1220 Infinity System to ensure compatibility.

Product Number	Module Name	Communication	Supported Firmware Versions (minimum)	Notes
G4286B	1220 Isocratic 600 bar	TCP/IP	B.06.21	
G4287B	1220 Isocratic 600 bar with Oven and ALS	TCP/IP	B.06.50	Upgrade G4286B with Oven and ALS. Use Lab Advisor to get new module number.
G4288B	1220 Gradient 600 bar	TCP/IP	B.06.21	
G4289B	1220 Gradient 600 bar with Oven	TCP/IP	B.06.50	Upgrade G4288B with Oven. Use Lab Advisor to get new module number.
G4290B	1220 Gradient 600 bar	TCP/IP	B.06.50	
G4291B	1220 Isocratic 600 bar	TCP/IP	B.06.50	Upgrade G4286B with Oven. Use Lab Advisor to get new module number.
G4292B	1220 Isocratic 600 bar	TCP/IP	B.06.21	Upgrade G4286B with ALS. Use Lab Advisor to get new module number.
G4293B	1220 Gradient 600 bar	TCP/IP	B.06.50	Upgrade G4288B with ALS. Use Lab Advisor to get new module number.
G4294B	1220 Infinity Gradient LC System with DAD		B.06.52	
G4288C	1220 Infinity Gradient LC System VL (400 bar)	TCP/IP	B.06.50	
G1389A	1220 Infinity Gradient LC System VL with ALS	TCP/IP	B.06.50	Upgrade G4288C with ALS. Use Lab Advisor to get new module number.
G4290C	1220 Infinity Gradient LC System VL with ALS	TCP/IP	B.06.50	
G4293C	1220 Infinity Gradient LC System VL with ALS	TCP/IP	B.06.21	Upgrade G4288C with ALS. Use Lab Advisor to get new module number.
G1362A	1260 Infinity Refractive Index Detector	CAN Cable	A.06.10	
G1321A	1100 Series Fluorescence Detector (FLD)	CAN Cable	A.06.10	
G4218A	1260 Infinity Evaporative Light Scattering Detector	RS-232	1.4	
G4260A	1260 Infinity 380 ELSD	RS-232	25.0	
G4261A	1290 Infinity 385 ELSD	RS-232	25.0	
G4260B	1260 Infinity ELSD	RS-232	30.38	
G4261B	1290 Infinity ELSD	RS-232 / LAN	30.38	

## Classic Driver Support Information – OpenLAB CDS ChemStation Edition

The modules listed in this section can be controlled with classic OpenLAB CDS ChemStation Edition drivers.

### Agilent HPLC – Sampling Systems

Product Number	Module Name	Minimum required Firmware Revision
G1313A	Standard Autosampler	A.06.10
G1329A	Standard Autosampler	A.06.10
G1329B	Standard Autosampler	A.06.10
G1367A	Well-plate sampler	A.06.31
G1367B	High Performance Autosampler	A.06.31
G1367C	High Performance Autosampler SL	A.06.31
G1367D	High Performance Autosampler SL+	A.06.31
G1368A	Therm. Well plate sampler	A.06.31
G1373A	Purge Kit	A.06.56
G1377A	High Performance Micro Autosampler	A.06.12
G1389A	Micro ALS	A.06.56
G2258A	Dual-Loop Autosampler	A.06.50
G2260A	Preparative Autosampler (High flow)	A.06.50
G2261A	Therm. High Flow ALS	A.06.31

### Agilent HPLC – Pumps

Product Number	Module Name	Minimum required Firmware Revision
G1310A	Isocratic Pump	A.06.10
G1311A	Quaternary Pump	A.06.10
G1312A	Binary Pump	A.06.10
G1312B	Binary Pump SL	A.06.10
G1361A	Preparative Pump	A.06.50
G1376A	Capillary Pump	A.06.10
G2225A	Nanoflow Pump	A.06.10
G2226A		

**Agilent HPLC – Detectors**

Product Number	Module Name	Minimum required Firmware Revision	Notes
G1314A	Variable wavelength Detector (VWD)	A.06.10	
G1314B	Variable wavelength Detector	A.06.10	
G1314C	Variable wavelength Detector	A.06.10	
G1314D	Variable wavelength Detector	B.06.30	
G1314E	Variable wavelength Detector	B.06.30	
G1315A	Diode Array Detector (DAD)	A.06.10	
G1315B	Diode Array Detector (DAD)	A.06.10	
G1315C	Diode Array Detector VL+	B.06.30	
G1315D	Diode Array Detector VL	B.06.30	
G1365A	Multiple Wavelength Detector (MWD)	A.06.10	
G1365B	Multiple Wavelength Detector	A.06.10	
G1365C	Multiple Wavelength Detector	B.06.30	
G1365D	Multiple Wavelength Detector VL	B.06.30	
G1321A	Fluorescence Detector (FLD)	A.06.10	No 3D option
G1362A	Refractive Index Detector (RID)	A.06.10	

**Agilent HPLC – Column Compartments**

Product Number	Module Name	Minimum required Firmware Revision
G1316A	Thermostatted Column Compartment	A.06.10
G1316B	Thermostatted Column Compartment SL	A.06.10
G1316C	Thermostatted Column Compartment	A.06.14

**Agilent HPLC – Quick Change Valves**

Product Number	Module Name	Minimum required Firmware Revision
G1156A	6Pos/7Port Valve	Requires an ALS - not configurable neither Classic, nor RC.NET.
G1157A	2Pos/10Port Valve	A.06.10
G1158A	2Pos/6Port Valve (Standard)	A.06.10
G1158B	2 Pos/6 Port Valve (1200 Series 600bar)	A.06.10
G1159A	6 Position Column Selector	A.06.10
G1160A	12Pos/13Port Selection Valve	A.06.10
G1162A	2Pos/6Port Valve (Micro)	A.06.10
G1163A	2Pos/10Port Valve (Micro)	A.06.10



**Agilent 1200 Infinity Series LC – Other Module types**

Product Number	Module Name	Minimum required Firmware Revision
G1390B	Universal Interface Box	A.06.10
G4240A	1260 Infinity Chip Cube MS Interface	A.06.10
G2229A	Nano Flow LC System	
G1364A	Fraction Collector	A.06.10
G1364B	Fraction Collector	A.06.10
G1364C	Analytical Fraction Collector	A.06.10
G1364D	Micro Fraction Collector	A.06.10

**Agilent A/D Converter**

Instrument	Supported Firmware Version (minimum)	Communications
Agilent 35900E	E.01.02	TCP/IP , LAN only

**Agilent 35900E A/D Converter support with Agilent Instruments**

Instrument	Supported with 35900E	Notes
11XX/12XX LC	Supported with both Classic and RC.NET	LAN only
7890A/B GC	No	
7820A GC	No	
68xx GC	No	
6100 Electrophoresis	Classic Driver only	LAN only
7100 Electrophoresis	No	

## In This Book

This guide summarizes the supported instruments and firmware for operation of the Agilent OpenLAB Chromatography Data System (CDS).