

# SOFTWARE UPDATE NOTIFICATION (SUN) – OMNISEC SOFTWARE v10.10: PSS0051-2



**MOLECULAR WEIGHT**



**MOLECULAR SIZE**



**MOLECULAR STRUCTURE**

## Introduction

This document details the installation and known issues with OMNISEC v10.10. This release is a major release to fix a number of critical issues and introduce a number of new features, including primarily the ability to connect OMNISEC and the SEC-MALS systems.

## Installation

It is assumed that you have authority to install or update software within your company's SOPs. If you do not have this authority please consult with your I.T. support department before proceeding.

It is assumed that you have Administrator rights for the computer. This is required by the installation process.

## Minimum System Requirements

Intel multi-core processor, 4 GB RAM, 500 GB free hard disk space, 1600 x 900 screen resolution running in 16 bit color mode, CD-ROM drive, 1 free USB port, Windows 7 Professional operating system.

## Recommended System Requirements

Intel Core i7 processor (Quad Core HT, 3.1 GHz Turbo, with HD Graphics), 8 GB RAM, 500 GB free hard disk space, 1920 x 1080 full HD screen resolution running in 16 bit color mode, CD-ROM drive, 1 free USB port, Windows 7 64 bit Professional operating system.

## Supported operating systems

OMNISEC software v10.10 is compatible with Windows 7. Both the 32 bit and 64 bit versions are supported.

Windows XP, Windows Vista, and Windows 8 and Windows 10 are not supported.

## Supported Languages

English (US/UK) only

This release is NOT compatible with operating systems in other languages.

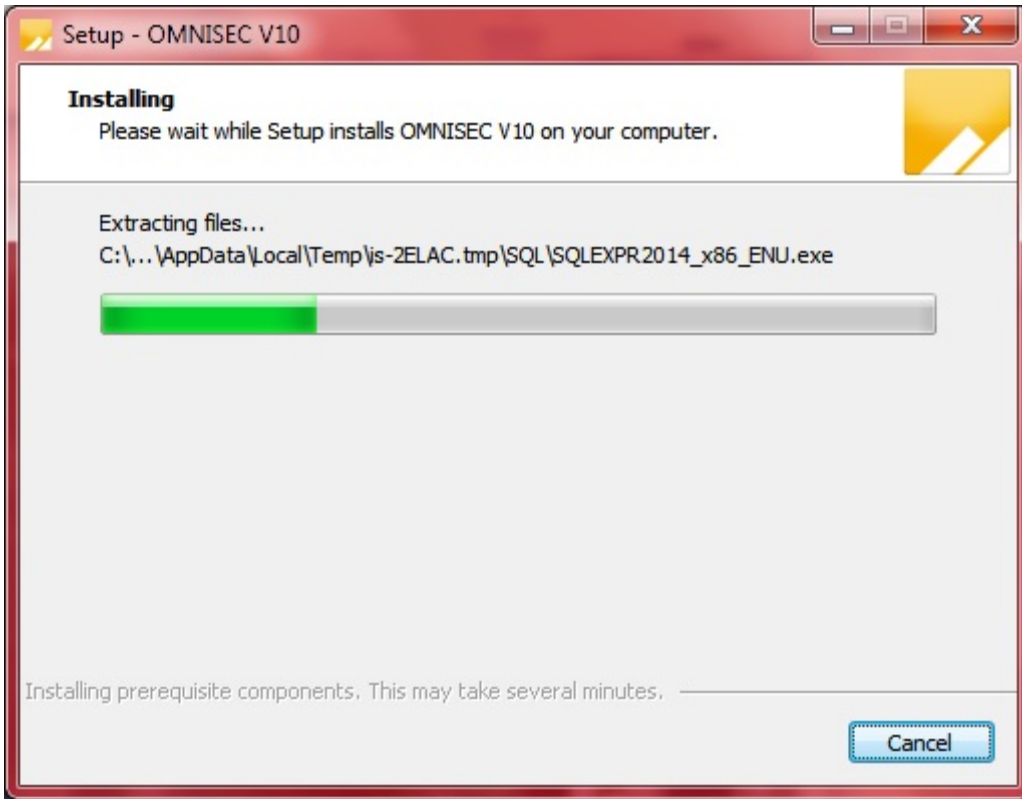
## Installation Instructions

### Windows 7

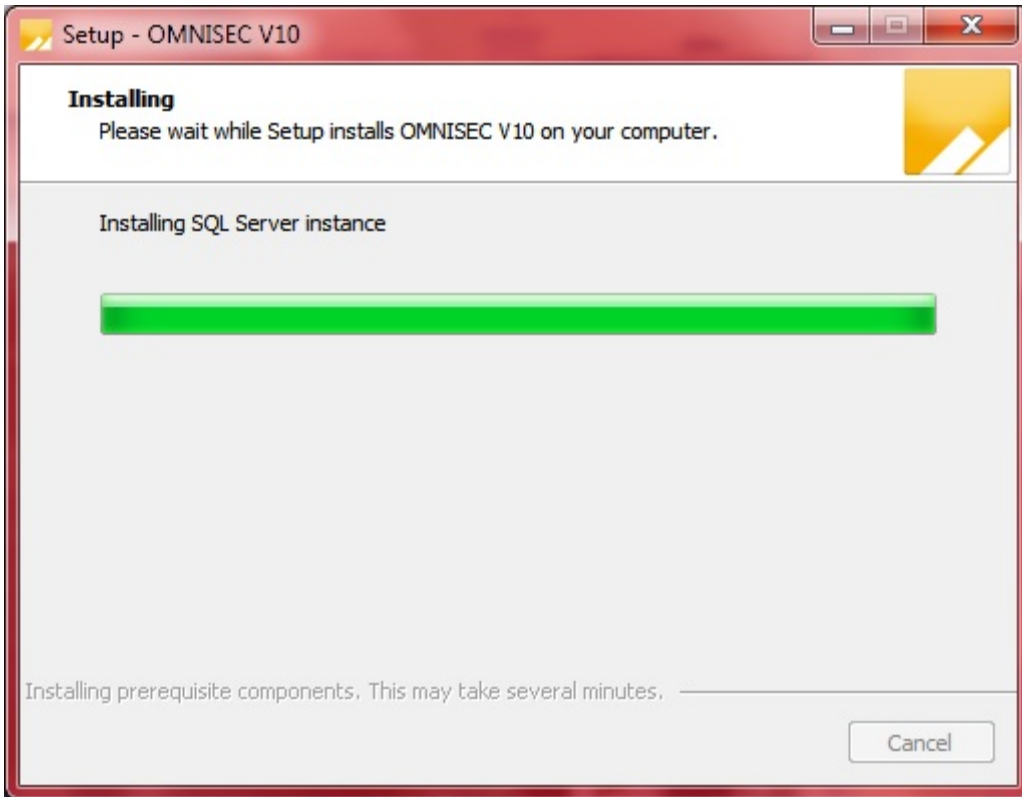
In most cases, OMNISEC should install automatically when the CD is inserted in the drive. If it doesn't, the user can double-click on the installer file, OMNISEC1010.exe, to begin the installation.



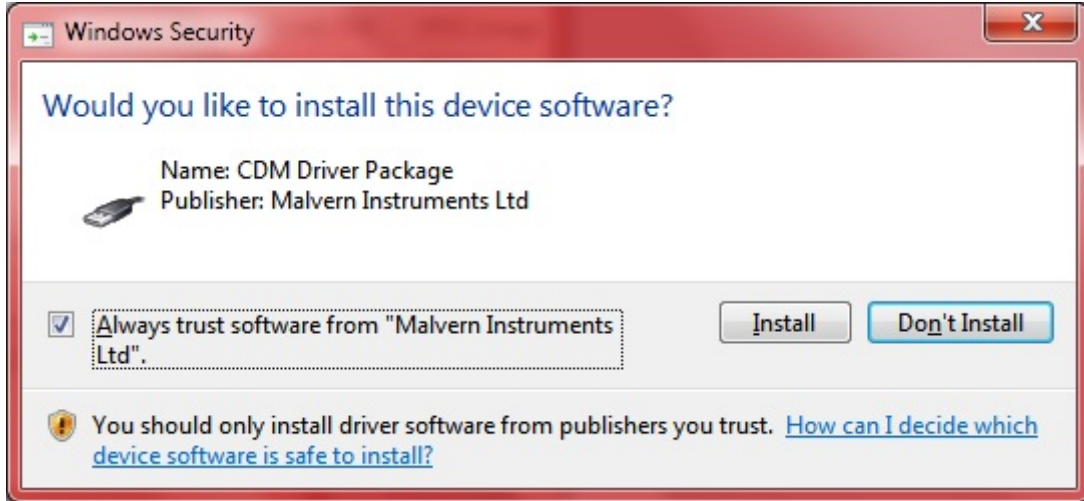
When the Setup window appears, select Next to process. You can select cancel if you would like to stop the setup and continue another time.



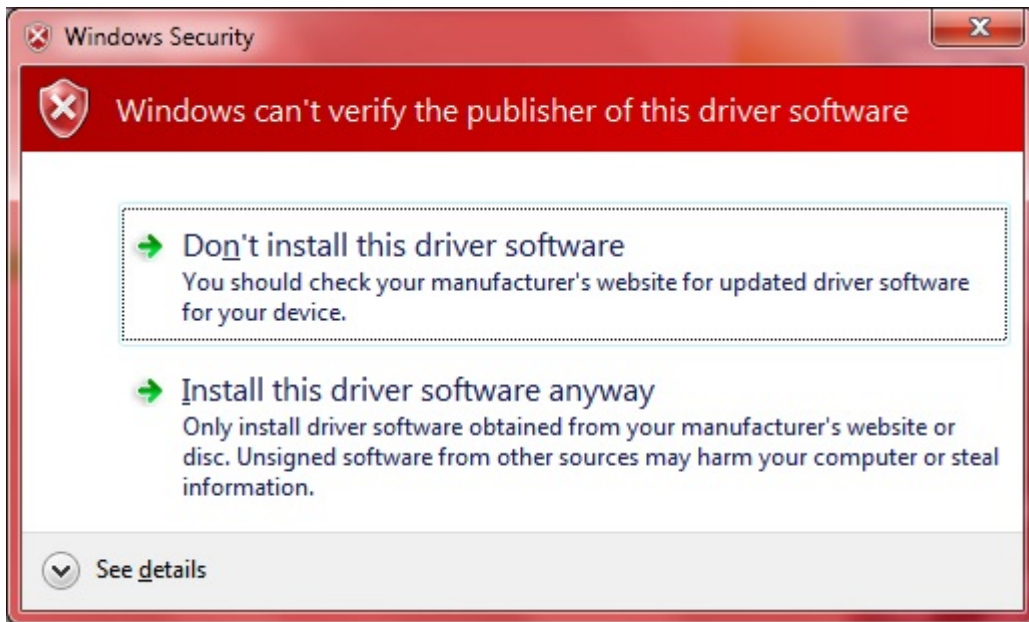
Once you have followed all of the instructions and clicked "Install", the software will begin the installation process.



If this is the first time OMNISEC v10 is being installed, it will install a 2014 SQL Server instance. This process may take 10 to 20 minutes to complete.

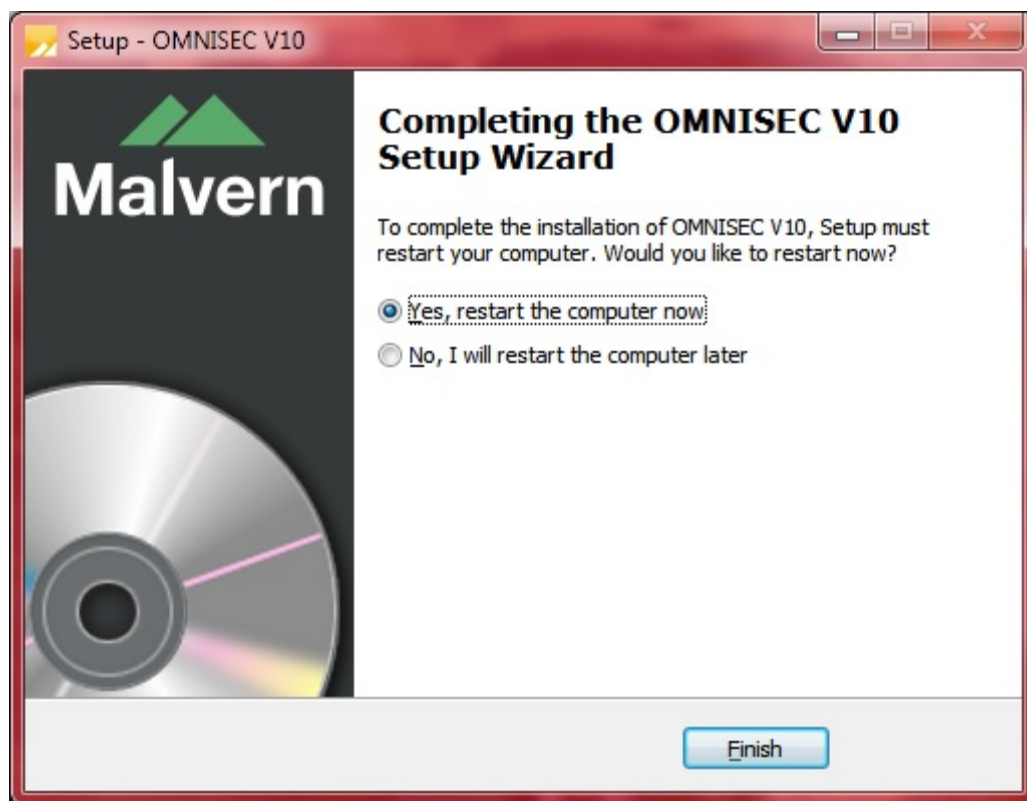


During the installation, a Windows Security window may appear asking if you would like to install a device. Select "Install" to install the device.



Another Windows Security window may appear stating "Windows can't verify the publisher of this driver software". Select "Install this driver software anyway" to continue.

This warning can safely be ignored as the software installation has been fully tested on Windows 7.



The last section in the Setup window will inform you that the computer needs to be restarted to complete the setup. Once the computer has been fully restarted, OMNISEC v10 will be ready to use.

## Connecting the OMNISEC to a PC

With the software installed, the instrument should be connected via the USB port, and the system switched on. If present, turn on OMNISEC RESOLVE first and wait 30 seconds for it to complete its startup. Next, turn on OMNISEC REVEAL and wait 1 minute to allow it to complete its startup and connect to OMNISEC RESOLVE. When the two instruments are connected, the light bars on both instruments should be green.

If this is the first time connecting the instrument to the PC, there will be a message that appears saying "Installing device driver software". The names used to identify the drivers will be "CMULx25", "CHROME TAU A" and "CHROME TAU B". Allow the installation to proceed and do not disconnect the instrument from the PC during this process. Once the drivers have been installed, Windows will indicate that they are ready to use.

## Uninstall Procedure

The software can be uninstalled using the 'Programs and Features' section of the Windows 7 'Control Panel'.

## New Features

The new features added to the software are shown in table 1:

Table 1: New features added to OMNISEC 10.10

Reference(s)	Feature
39895	The OMNISEC system can now be installed and run without a Viscometer
39894	The OMNISEC system can now be installed and run without a RALS/LALS detector

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<b>39649</b>	The SEC-MALS 20 detector can now be connected to the OMNISEC system and the two run in conjunction
<b>39749, 39751, 39764, 39774, 39777, 39768</b>	MALS signals have been added to all chromatogram displays in the software
<b>39849</b>	MALS parameters are present in the records view
<b>39796</b>	Molecular weight and Rg can be calculated using MALS
<b>39794</b>	The MALS detector can be calibrated
<b>39789, 39787</b>	MALS can be selected as the active detector in the calculation method
<b>39765</b>	Baselines and limits can be set for MALS data
<b>39807, 40072</b>	The MALS data can be overlaid in a 2D plot
<b>39819</b>	The MALS data can be overlaid in a 3D plot
<b>39767, 39769, 39848, 39847</b>	MALS data can be displayed in the Model/Fit view. MALS analysis settings can be updated in the Model/Fit view
<b>39824</b>	MALS parameters and results can be presented in the reports
<b>39805</b>	MALS options have been implemented in the options menu
<b>39802</b>	The MALS leak and vapour sensors are active
<b>39801</b>	MALS data can be exported to OmniSEC versions <10 for analysis
<b>39798</b>	The 90 degree MALS angle peak area can be calculated
<b>39755</b>	The software can control the MALS laser state and power
<b>39754</b>	The software can control the MALS cell temperature
<b>39753</b>	Most of the simulated data files now include MALS data.
<b>40149</b>	Automated Calculation Method naming has changed to remove the date and time and replace these with a simple increment e.g. -1, -2, -3
<b>40208</b>	The PDA data and MALS data windows can be hidden if not used using the Report Selector.
<b>39908</b>	Most numerical input boxes have been formatted and now include up/down arrows to change them with the mouse
<b>39638</b>	It is now possible to display calculated dA/dc
<b>40151</b>	A number of results fields about dn/dc and concentration have been renamed to clarify their content.
<b>40195</b>	The Mark-Houwink plot now displays a dotted line in regions where the molecular weight or IV was extrapolated
<b>40212</b>	The number of significant figures displayed for calibration constants has been reduced

<b>40214</b>	When closing the software, it will ask the user whether or not to return the pump to standby flow rate
<b>39644</b>	The records view can now display: autosampler temperature, detector temperature, column oven temperature. The reports can now display: autosampler temperature, detector temperature, column oven temperature, column set, pump pressure
<b>40361</b>	The band broadening corrections in the software have been updated to make them more robust and reliable. Two versions are now offered in the Calculation Method dialogue. Version 1 offers compatibility with OMNISEC versions 10.0 and 10.02. Version 2 is newer and should be used by default for future analyses.

## Fixed issues

The main issues fixed in this release of the software are listed in table 2.

**Table 2: bug fixes implemented in OMNISEC 10.10.**

Reference(s)	Issue	Comment
<b>40150</b>	Editing the Run Conditions took a long time to execute	This has been sped up
<b>40125</b>	When including UV data, the software used a large amount of memory	PDA data is now loaded via a 'lazy-loading' process
<b>40143</b>	Loading data occasionally caused a crash due to the PC being "out of memory"	Fixed
<b>40181</b>	Auto-calculation of results sometimes did not occur	Fixed
<b>40191</b>	In imported data, the reported "acquisition date" was actually the import date	Acquisition date is now correctly reported
<b>40160</b>	In the raw data view, the right click menu would sometimes appear in random locations after setting baselines	The right click menu now always appears next to the mouse
<b>40104</b>	The values on the molecular weight distribution axis in the Distribution Plot were incorrectly reported by a factor of 1000	Corrected
<b>39517</b>	Occasionally during a run, a maximum or minimum signal is recorded across all detectors for approximately 2 seconds.	Fixed
<b>39271</b>	When the autosampler encounters a missing vial, the message "Please set the sample and retry" is displayed.	The system can now skip missing vials and move on to the next sample
<b>39621</b>	The Export to OmniSEC 5.1 function cannot export UV data if the data file is too large and the software will freeze.	Fixed
<b>39631</b>	After resizing windows in the software, copied and pasted images may appear with a black border.	Fixed
<b>39619</b>	It was not possible to edit and save a custom report	Fixed
<b>40194</b>	The first few seconds of a run often contained large signal jumps in one or more detectors.	Fixed
<b>40152</b>	Baseline monitors have been removed from the Sequence database to reduce its size	

40336	The column widths in the record view will now persist to the user's settings	
40383	The option to make 12 hour baseline monitor runs would sometimes be hidden even when the UV detector was disabled.	Fixed
40394	The splash screen displayed while the software is loading is no longer forced to the top	

## Known Issues

The following software bugs have been discovered within the software, and will be investigated as part of a future release. Please follow the suggested work-around.

**Table 1: Known issues in OMNISEC v10.10 software.**

Reference(s)	Issue	Workaround
40278	Autoscaling does not work as intended	Manually scale the axes and save them using the "Save my axes" command
39602	After extended periods of working with large datasets, the software may run out of memory	Save analyses regularly and restart the software if the problem occurs
39571	If the software is importing data while running and the data acquisition completes, the software may crash	Avoid importing data when a data acquisition is nearing completion
39314	The search feature in the columns database only works for column sets, not columns.	Manually search the columns list.
39315	Internet Explorer may block the help file from appearing depending on security settings	Allow Internet Explorer to display blocked content.
39617	After some crashes, the software may not restart	Disconnect the OMNISEC system from the PC and reconnect it. Alternatively, re-install the software. No data will be lost by doing this.
39623	During a baseline monitor, the retention volume assumes the flow rate is 1mL/min meaning retention volume may not be displayed correctly.	When running the baseline monitor, assume the Retention Volume is actually reporting Retention Time.
39350	The Calculation Method Summary compare function is not working	Unfortunately there is no workaround at this time and it will be implemented as soon as possible.
39364	The Help button in the Report Selector does not function	Open the help file from the Start Page or another area.
39446	The Copy button does not work in the Print Preview window	Copy the image directly from the report pages or the charts.
39480	It is possible for the Zoom buttons in the ribbon bar to be inappropriately greyed out.	Use the right click menu in the chart you wish to zoom out of.
40695	When sample type, dn/dc or concentration are updated, it updates this value for all injections in that sample, however, only the currently selected injection is recalculated.	Select other injections for that sample and recalculate and save them to bring all the results up to date.



**40696**

If data containing MALS signals are exported to OMNISEC archive V10, then any analyzed results will be lost even if they are not based on the MALS data

Only export MALS-containing data to V11 format.

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