

## 1 Purpose

This document describes new features and fixed bugs in the following new software version in comparison with the previous version.

- New version: 4.1.1.130
- Old version: 4.1.1.108

## 2 New features

Topic	Description
BWIQ integration	You can set up quantification models from BWIQ in the operation method of the routine analysis.
BWIQ integration	You can view the file content of a BWIQ model.
BWIQ integration	You can test quantification models from BWIQ.
BWIQ integration	You can perform outlier detection by M-distance and residual variance during quantitative analysis with BWIQ models.
Drivers for B&W Tek	Drivers for B&W Tek portable Raman instruments have been added. Vision supports the following instruments with 532 nm and 1064 nm laser excitation: <ul style="list-style-type: none"><li>▪ i-Raman EX</li><li>▪ i-Raman Prime 532H</li><li>▪ i-Raman Prime - 1064</li></ul>
I/O controller software	Vision can operate with up to 16 channels through communication protocols by using the Vision I/O controller software.
Export formats	You can export spectra as SPC files and NSAS files.
Error leverage calculation report	Error leverage calculation reports are available for Unscrambler and BWIQ. An <b>L</b> or <b>BWIQ</b> at the end of the report name indicates whether the report is to be used for Unscrambler or BWIQ.
Import spectra	You can import spectra that were collected with the Vision Air version for DS2500 Liquid Analyzer into Vision.

Topic	Description
Export prediction models	You can export prediction models that were made from spectra of the DS2500 Liquid Analyzer from Vision. You can use the exported prediction models in Vision Air for the DS2500 Liquid Analyzer.

### 3 Improvements

Topic	Description
General user interface	In <b>Configure ► Configuration</b> you can define whether the x-axis shows the wavelength or the wavenumber. If you choose wavenumber, then the tab <b>Reference</b> becomes <b>Dark</b> (read-only).
ratio3 file	In <b>Project ► Options</b> the use of the ratio3 file is optional as for the reference standardization for NIR.
Synchronization between project options and DCM	If the project options differ from the current data collection method, Vision warns that the project options are not synchronized.
Modify operation method	You cannot modify the operation method in an output project. Vision prompts whether you want to open the correct project with the operation method.
Sample information	Vision can display sample information for a product for sample sets with up to 10'000 samples.

### 4 Fixed bugs

Topic	Description
Driver for Hellma MUX	In the driver for Hellma MUX you could not select transmission mode in the MUX table of the data collection method. This has been fixed.
Driver for Hellma MUX	In the driver for Hellma MUX you could not apply window correction. This has been fixed.
CU test	If you ran the Content Uniformity (CU) test, then the output project displayed the number of measured spectra +1. The additional spectrum was a duplicate of the last measurement. This has been fixed.
Tray display	Vision used the display of trays and the setting options from an old system instead of the new design and the new settings that were created for the XDS series. This has been fixed.

Topic	Description
Tray settings	If you used tray settings for a measurement, then only the reference was measured. No samples were measured. This has been fixed.

## 5 Known bugs

Topic	Description
Driver for Hellma MUX	The driver for Hellma MUX applies window correction to 1 channel only.
CU test	If you run the Content Uniformity (CU) test from an output project, then for the first selected tablet the reference is measured instead of the tablet.  However, Metrohm does not recommend to start measurements from an output project.
CU test	The report for Content Uniformity (CU) tests does not display the whole serial number of the instrument but only the first 4 digits.
CU test	If you create a report immediately after performing a Content Uniformity (CU) test, then the report shows as measurement time the time of the last measurement. If you analyze the measurements with the <b>Recall result</b> function, then the report shows as measurement time the time when the CU test was started.
Low flux test with external standard for the XDS MasterLab Analyzer	If you select the low flux test with external standard for the XDS MasterLab Analyzer in reflectance mode, then the RCA paddle does not open. Therefore the external standard cannot be measured. However, Vision measures the internal standard and the measurement runs without an error. However, the report displays the external standard.
Sample ID Sorting function	In seldom cases, the <b>Sample ID Sorting</b> function does not work. This issue occurs with sample names structured as XX-XXXXXX YYYYYYY (X = Number, Y = letter).
Instrument calibration report	The instrument calibration report for the DS2500 Solid Analyzer displays the XDS RapidContent Module in the instrument information.
B&W Tek portable spectrometer	The displayed CCD temperature reading is not correct for all instrument models.
Tray selection	In seldom cases, the tray sample position selection window does not display the correct tray setup. Selecting the tray again can solve this issue.

Topic	Description
Wording "vial"	The tray configuration dialog uses the wording "vials" regardless whether a tray for vials or a tray for tablets, capsules etc. is used.

**6 Compliance**

The current software version does not contain any modifications that affect conformity of Vision regarding GAMP.

Requirements of 21 CFR Part 11 can only be activated when a Vision Pharma License has been used for the installation of Vision.