

Software Update Notification

PSS 0025-24 Morphologi Software v8.10

**PARTICLE SIZE****PARTICLE SHAPE****CHEMICAL IDENTIFICATION**

Overview

This document details the release of software PSS0025-24. This is the Morphologi software version 8.10.

It covers software issues fixed and new features introduced.

This information is required to perform a risk analysis to determine if the software should be installed. In this risk analysis the benefits of the new features provided and resolved software issues must be weighed against the risk of new issues that may be introduced to vital areas of the software or possible changes to the results of future analysis.

Installation instructions are provided.

Operating System Support

This software is tested and supported on Windows 7™ (32-bit), Windows 7™ (64-bit) and Windows XP™ (32-bit). PCs running the Morphologi G3-ID instruments must run Windows 7™ (32-bit) English language version only.

Note. Some 3rd party software or OS patches may prevent the Morphologi software from running correctly. It is not possible to test for compatibility with all windows programs.

Windows 2000™, Windows 95/98/Me™, Windows NT 4.0™, and Windows Vista™ are not supported.

Recommended minimum computer requirements

DELL Mini Tower PC with keyboard and operating system, Windows 7 (32-bit), Intel Core i7 3770 Processor, 4Gb RAM, 1Tb HDD, DVD +/-R/RW, Firewire (IEEE1394) card and at least one USB port, complete with mouse, keyboard and 1 x 22" Widescreen Flat Panel Monitor for software and 1 x 22" widescreen Flat Panel Monitor for live video feed.

PCs using a Morphologi G3-ID instrument will require an extra USB port and an extra RS232 port.

Installation

It is assumed that you have authority to install or update software within your company's Standard Operating Procedures (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.

The software is supplied on a CD-ROM that will automatically start the installation process when inserted into the drive. If your system does not support this feature run the \Morphologi\setup.exe program from the root directory of your CD drive.

Upgrading Installation

Always uninstall any existing version of the Morphologi software before installing any other.

Upgrading an existing installation to use a 64-bit operating system may require a firmware upgrade to the camera on the instrument.

Uninstall procedure

The software can be uninstalled using the standard Add/Remove feature in the Windows 'Control panel'.

Note. Uninstalling previous versions of the software will remove all the standard Malvern reports, even if they have been edited. Best practice is to avoid overwriting standard Malvern reports.

Back compatibility

This version is back compatible with all prior versions of the Morphologi software.

Note that existing systems must not be upgraded from version 5.xx until a Malvern representative has visited to perform an 'instrument characterization' process.

Morphologi G3, G3S and G3-ID instruments are fully supported.

There is no support for the predecessor PVS 830 instrument with this release.

New features summary

- Support for 64 bit Windows 7™
- New particle fiber parameters
- Morphologi G3 and Morphologi G3-ID instrument support in one software package
- Export/Import of entire measurements for ease of data transfer
- Optimized chemical ID targeting for large particles
- Improved result handling
- Bulk export of spectra

Fixed issues

Description
Only reprocess chemical data when the chemical settings change (improved performance)
Improved plate leveling mechanism in long running ID measurements

Known issues

If you find an issue with this software that is not listed below please report it to Malvern Instruments via your local Malvern Instruments representative or directly to the UK helpdesk using the contact information below.

Work Item 25263: Slow stage on start-up after unexpected power down of the instrument

Workaround is to wait for the stage to initialize, this may take 10 minutes or more depending on the stage position when it was powered down.

Work Item 28786: Merged multi-slide measurements will not do chemical measurements

Workaround is to measure each slide separately then combine the results together afterwards.

Work Item 29158: BF/DF setting is not automatically controlled during SOP threshold image acquisition

Workaround is to ensure that instrument is in the right BF/DF condition for the SOP being edited.

SCR5901: Stopping a merge while measuring with the first optic aborts only the current optic and goes on to measure with the second.

Workaround is to stop each optic in the merge.

Power saving.

If the computer goes into standby mode after a period of inactivity the measurement can hang. Since measurements of large areas can take some time this is a likely event. The solution is to disable the power saving options of the computer using the instructions in Appendix A: Disabling power saving.

USB suspend must also be disabled on the PC see Appendix B: Disabling USB selective suspend.

Remote PC 3rd party support software packages.

Installation of software for remote PC support and desktop sharing can interfere with the live display on the second monitor and cause the software to crash during measurement.

Data backup.

Backup of data to external devices like external hard drives or network servers during measurement can slow down the measurement or cause the software to crash. Automatic backups should be scheduled at times when the instrument is not in use.

NOTE : Upgrading an existing installation requires the camera driver to be upgraded.

To upgrade the camera driver once the Morphologi software has been upgraded, ensure that the camera is attached to the PC then open the windows device manager and uninstall the Baumer camera driver. Then scan for hardware changes and direct windows to the drivers\camera folder inside the Morphologi installation folder. For details see Malvern technical note "Updating the camera driver on a Morphologi instrument" (MRK1516) available from Malvern helpdesk or your local service representative.

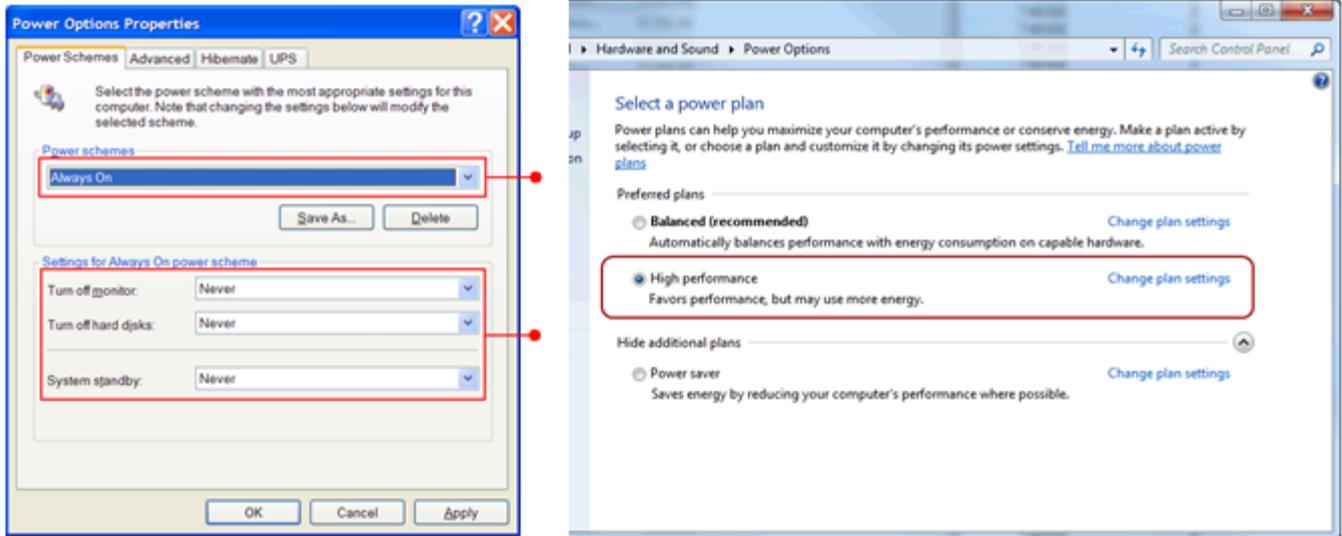
NOTE : Upgrading an existing 32 bit installation to 64 bit requires the camera firmware to be upgraded in addition

To upgrade an existing installation to 64 bit the camera will require new firmware to be installed, please contact your local service representative to arrange this.

Appendix A: Disabling power saving.

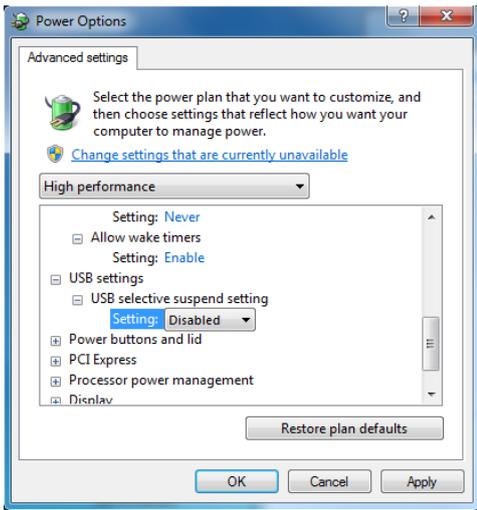
To disable the power saving options of the computer use the Power Options available in Control Panel.

Modify the default settings to those highlighted below for your OS - XP(left), Windows 7 (right).



Appendix B: Disabling USB selective suspend

From the power options dialog shown in Appendix A, select Change plan settings and set USB selective suspend setting to Disabled.



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