

## Risk assessment for software updates Cubis® MCE

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## General Information

### Overview

In case that a new software version is released a risk assessment for re-qualification is executed. The objective is to evaluate all software changes regarding the question, whether they require a repetition of the qualification of this instrument which ran with a previous software version.

This document provides the information and recommendation for all software updates for Cubis MCE. The software for MCE is delivered as a "Firmware package".

All releases are cumulative packages and contain the changes of previous versions. Only the latest version needs to be installed. However, all release information and qualification recommendations of the releases between the installed and the latest must be taken into account if you update across multiple versions.

### Scope

This document is valid for all Cubis® Models MCE.

### Risk assessment

All software changes (bug fixes, improved functionality and new functionality) implemented in the new version will be classified as following:

Classification	Algorithm changed	Effect on result	Example	Re-qualification
major change	yes	yes	The measurement algorithm was changed, so that the numerical results could be affected.	recommended
minor change	yes	no	Improvement of measurement parameters and reliability	Whether a re-qualification is recommended depends on the current users application; usually not necessary
announcement	no	no	Adding a new language.	not recommended

## Firmware package 09-05-02.02.04 CN:410E

Release date: 2019-03-07

Summary:

This is the first public firmware release.

## Firmware package 09-05-02.02.05 CN:410E

Release date: 2019-04-05

Summary of changes from previous version:

This update contains only fixes and no functional extensions.

List of changes from previous version:

Sartorius ID	Brief Change Description	Comment	Classification
Cubis-15557	Fix: sporadic ERR235 after restart	internal communication improved	minor
Cubis-15683	Fix: PC-Direct character issue	wrong character no longer at start of line	minor

Recommendations:

The update is optional. Install only if ERR235 appears or when using PC-Direct function.

A re-qualification is not recommended for the update from the previous version.

## Firmware package 09-05-03.01.05 CN:FE13

Release date: 2020-02-05

Summary of changes from previous version:

This update contains bug fixes and functional extensions.

List of changes from previous version:

Sartorius ID	Brief Change Description	Comment	Classification
Cubis-15338	Add: weigh cell mode	Fast SBI output in weigh cell mode	announcement
Cubis-15601	Add: Automatic print for animal weighing	Option to automatically print final value	announcement
Cubis-15001	Fix: Output buffering for serial protocols	Improved handling of interrupted data transmission	minor
Cubis-15131	Fix: random error in digital corner load compensation	Random startup problems of digital corner load compensation are solved	minor
Cubis-16457	Add: level check before internal adjustment	Prevents adjustments on verified balanced if not leveled	minor
Cubis-16730	Fix: Linearization with Preload	Linearization now possible with preload	minor
Cubis-17631	Fix: SBI commands for draft shield M	SBI commands for micro balance draft shield now compatible to Cubis 1	announcement
Cubis-19611	Fix: Error when cancel during external adjustment	Cancel now works under all conditions	announcement
Cubis-14886	Add: Extended PC-Direct	Support Unicode characters; format issues	announcement
Cubis-19088	Fix: Lock of touch screen	Automatic reset of touch controller	announcement
Cubis-20792	Fix: Representation of "e" and "Min" on MCE2.7s	"e" and "Min" are now shown correctly	announcement
Cubis-14856	Fix: SBI format issues	Aligned SBI output with MCA and Cubis 1	announcement

Recommendations:

The update is optional. Install only if one of the changes is relevant.

A re-qualification is not recommended for the update from the previous version.

## Firmware package 09-05-03.02.01 CN:FE13

Release date: 2020-11-12

Summary of changes from previous version:

This update contains bug fixes and functional extensions.

List of changes from previous version:

Sartorius ID	Brief Change Description	Comment	Classification
Cubis-16909	Fix: warmup warning message	Corrected the warning message for warmup time	announcement

Recommendations:

The update is optional. Install only if one of the changes is relevant.

A re-qualification is not recommended for the update from the previous version.

## Notes on the software update procedure

It is recommended to perform the software update in the following order:

1. Get a USB flash drive with FAT32 file system. NTFS is not supported!
2. Extract the provided ZIP file on a USB flash drive to the root directory.
3. Plug the USB flash drive into the USB-A port on the back side of the balance or electronic box.  
=> The balance should "beep" after a second to confirm that an update is available and possible.
4. Make sure that the power supply is not interrupted during the update.
5. Press menu button and select "Update". This option is only available when an update is found and possible.
6. Wait for approximately 2 minutes for the update to complete. The balances reboots several times.
7. The update is finished when the weighing screen appears. Remove the USB flash drive.

Note for stamp approved versions: The above update procedure is only possible while the menu access switch is set to open.