

Mira P / Mira M-3

Release Notes

8.0927.8002EN / 2018-12-04



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9.0.1.51 / 5.0.1.34

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1 Purpose

This document describes the fixed bugs and problems as well as improvements in the following new firmware versions in comparison with the previous versions.

- Mira P
 - New version: 9.0.1.51
 - Old version: 9.0.0.27
- Mira M-3
 - New version: 5.0.1.34
 - Old version: 0.1.0.7



2 New features

Topic	Description
Container mode (auto-increment and rescan)	<p>Auto-increment allows the user to define a starting container number and an ending container number. The instrument takes care of completing the container field.</p> <p>Rescan mode allows the manager or admin to set parameters for passing or failing individual containers.</p> <p>These features are defined in operating procedures in the software but only run on the instrument.</p>
CVA support	The firmware supports the calibrate/verify attachment.
Database permissions	Each instrument can be set with specific synchronization permissions for specific MiraCal instances. Instruments can be set to not allow download (and deletion) of data on any MiraCal instance other than the ones defined in the permissions. This ensures complete data integrity.
Model building algorithm	Adopting industry standard (USP) PCA calculation of p-values.

3 Improvements

Topic	Description
Obvious PASS/FAIL	The status of a test is made very clear to the user. The text is legible and the color is unambiguous.
Y-calibration switched to mathematical fit function	Intensity calibration has been switched to a more reliable and reproducible method which is traceable to NIST SRM 2241 as stated in USP.
Proprietary instrument driver for more reliable connection	Instrument is now recognized by MiraCal automatically. It is not necessary to select a COM port.
New peak-finding algorithm Center-of-mass	The firmware runs a Center-of-mass type peak-finding. This helps to deal with peaks that are landing between 2 pixels.
Battery Life Indicator	Optimized battery management thresholds.
Spectrum acquisition	Optimization of acquire and reference collection.



6 Compliance

The new firmware version supports the CVA and fixes previous gaps in data integrity. Thus the new firmware version improves MiraCal compliance with 21 CFR Part 11, GMP and ALCOA (PLUS). The new firmware version improves MiraCal conformity with USP and EP guidelines.