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Software Release Notes | matriq AG

Version 3.2.3 – 22. October 2026

New

- Admin accounts can now be created, edited and deleted under “Settings” → “Users” on the tablet. Their six-digit PINs can also be changed here. The initial admin PIN is the last six digits of the LinQ’s serial number.
- The LinQ can now be reset if all Admin login credentials have been forgotten, provided device reset is enabled. Resetting permanently deletes all stored data and settings.
- A warning triangle in the top-right corner indicates missing NTP servers or unconfirmed time synchronisation. Tap it to view details and access the time server settings.
- Marking can now be enabled or disabled for all channels together in the Dashboard.
- A cavity can now be assigned in the channel detail view in the Dashboard.

Changed

- The MQTT settings and connection diagnostics have been made clearer. The "Unavailable codes" field shows serial numbers that have been reserved or submitted for marking without a confirmed result.
- After a power interruption, five serial numbers per channel are skipped when marking resumes with "Count Up" or "Constant + Count Up" to prevent duplicates.
- The update progress display has been improved. Successful completion is verified before the update is reported as complete.
- The Insert Health view now displays the Insert ID. Unused pixels are no longer included when determining the minimum and maximum resistance values.

Fixed

- MQTT serial numbers already submitted for marking are no longer released for reuse after a timeout. Recovery after device and controller restarts has been improved.
- MQTT connection interruptions are detected more reliably. Unacknowledged marking notifications remain stored for later transmission.
- Enabling and disabling marking now waits for confirmation from the hardware.
- Marking timestamps and the transmission of millisecond values for the marking delay have been corrected.
- Insert measurement evaluation, recovery of DoE experiments and the assignment of their marking grades have been improved.
- PIN login, navigation after changes to the time server settings and USB data export have been made more reliable.
- Existing static network settings are preserved when switching to DHCP.

- The display of firmware versions after a firmware update has been corrected.

Version 3.2.1 – 24. August 2026

- MAC-based IP address reservations are now handled more reliably in DHCP mode.
- Disconnections from external MQTT brokers are detected faster and more reliably.
- Used Marking feedback is sent to connected MQTT systems regardless of the code source type, while duplicate feedback is prevented.
- The stability of DoE workflows has been improved, particularly during interruptions and when using the new tablet.
- Cavity Assignment: Inserts can now be assigned to cavities. These assignments are also reflected in marking and traceability data.
- User-approved private and self-signed certificates are now supported for secure MQTT connections.

Version 3.2.0 – 31. July 2026

Important

Yocto version 2.2.55 or later is required to use this or any subsequent version.

New

- Serial numbers can now be transmitted through MQTT. The feature supports both MQTT server mode and MQTT client mode. To use this feature, customers need their own software for creating and managing serial numbers.
- Added Design of Experiments support to help determine the best parameter combination for a specific polymer type, including marking delay, marking duration, and target temperature.
- Added an Admin user role for critical system changes. The Operator role now has read-only access to the Settings page and cannot modify system updates, time server settings, timezone configuration, or network settings.
- Added new diagnostic tools for insert health assessment and fault analysis. Live sensor readings for the insert ASIC temperature, trigger sensor measurement (R trigger), and pixel heating current (I heat) are now available.
- Added a screenshot feature. Screenshots are automatically saved on the device.

Changed

- The maximum cycle time has been increased to 200 seconds.
- Exported marking data in Expert mode now shows the marking time in a readable date/time format (`dd.mm.yyyy hh:mm:ss`) instead of a Unix timestamp. The previous `marking_parameter` and `timing_info` columns have also been split into separate columns for easier analysis.

- Improved update process with more detailed progress and failure information. Enhanced security through validation of file types and detection of corrupted update files.

Fixed

- Manually setting the time / timezone is now working reliably
- Various controller improvements to enhance performance and stability, including reduced overheating and improved update reliability.

Version 3.1.3 – 26. November 2025

New

- Two detail levels are now available when exporting markings: *Basic* and *Expert*. *Basic* includes only parameters that can be configured via the user interface, while *Expert* continues to include all marking parameters.
- When exporting markings, the number of exported entries can now be defined individually (e.g. last 500).
- Improved user guidance during system updates. The system now clearly indicates when an update has been finished. This also applies to restarts triggered by changes to the system time or network settings.

Changed

- Redesigned channel configuration window.
  - The *Save* button has been removed. Changes in the *Marking* and *Contrast* tabs are now saved automatically.
  - Marking functionality can now be enabled or disabled via a switch.
  - Input fields now provide more detailed error messages. Invalid marking codes are immediately detected and can no longer be saved.

Fixed

- The online status in the top menu no longer shifts into the content area.
- *Marked Code* and *Last Marking* are now displayed correctly for multiple inserts.
- Deactivating the marking now works reliably on the first toggle of the switch.

Version 3.1.2 – 24. September 2025

Fixed

- Expired dynamic QR codes on the help page have been replaced with static QR codes.

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Version 3.1.1 – 2. September 2025

New

- Added support for multiple languages.
- The kiosk mode can now be controlled through the software (in the code). Currently, this prevents pull-to-refresh on tablets.
- User manual available as a PDF in multiple languages.
- When changing the marking code for the *Constant* marking pattern, more precise error messages are now displayed. Invalid codes can no longer be saved.
- The time and software version displayed in the status bar (top bar) are now clickable and lead to the respective pages (*Settings / Time Synchronization* and *Settings / LINQ Update*).

Changed

- Added visual feedback during setup. Various parameters are now displayed in a graph.
- The appearance of restart dialogs has been standardized.

Fixed

- The time shown in the top menu bar is now correctly displayed in the selected time zone.
- The ± buttons on the setup page now respond reliably even when pressed quickly (no more endless toggling between two values).
- The online icon remains visible even with long time zone names.
- The time since the last marking, displayed on the dashboard, now remains correct after switching pages.
- The *Save* button on the setup page is now disabled when the target temperature is outside the valid range.
- In the marking patterns *Count Up* and *Constant + Count Up*, step values smaller than 1 are no longer allowed.
- The *Constant* pattern can no longer be saved with an invalid marking.

Version 3.1.0 – 12. June 2025

New

- Added new marking pattern *Constant + Count Up*.
- The last marking state is now saved, allowing the LinQ to continue from the same point when reactivated.
- Network configuration now supports setting IP address, subnet mask, gateway, and DNS.
- OPC UA authentication and connection parameters can now be configured directly via the user interface.

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Changed

- The marking configurations for the *Count Up* and *Constant + Count Up* patterns now include a counter reset button and a preview of the next marking.
- Export and refresh buttons in the marking table are now more visible.
- All marking patterns are now displayed without scrolling and grouped by use case.

Removed

- Heating and duration parameters have been removed from the controller configuration. They must now be configured individually (previously, they applied to all modules).

Fixed

- In *Count Up* mode, the counter step value now works correctly; previously, it always remained at 1.
- Minor design issues fixed.
- Decimal values can now be entered correctly in setup fields.

Version 3.0.2 – 17. March 2025

New

- NTP time synchronization with configurable server hostnames.
- Local and offline time settings with adjustable date, time, and time zone.
- New OPC UA interface with both server and client functionality, offering extended detail features.

Changed

- The insert/channel configuration has been divided into two sections: *Pattern* and *Insert Setup*.
- Instead of trigger delay and heating duration, the configuration now primarily uses the cycle time in combination with the target temperature.

Version 3.0.1 – 18. September 2024

New

- Integration of the FullyKiosk JavaScript API for file management and advanced device control.
- Improved OPC UA connectivity for Arburg IMM servers.
- Added reset button for controller and modules.
- New firmware released with fixed SDO timing issues.
- Added *Insert Setup*.
- Configurable marking export with multiple options.

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Changed

- Software has been restructured and optimized for performance.

Fixed

- Generation of diagnostic reports now works reliably.

Version 3.0.0 – 20. June 2024

New

- New update process with encryption and decryption of compose files.
- Simplified marking table view for tablets.

Changed

- Time display switched to UTC — only the system time is now shown.
- New status indicator integrated into the desktop interface.

Fixed

- Offline feedback revised: the update process now logs all steps and continues correctly after a page change.
- LED color is now displayed correctly when activated (on hardware).
- Software version is now shown correctly on the tablet interface.
- Floating-point values (e.g. 1.5 s) can now be used for trigger delay.

Version 2.2.1 – 14. May 2024

New

- Added tablet user interface.
- Integrated dashboard view for tablets.
- Intelligent random generator that automatically skips defective pixels.
- Collection of Docker logs and system statistics via Fluentd.

Changed

- The desktop user interface now runs on port 8080.

Fixed

- Log timestamps are now displayed without time offset in the desktop interface.
- The order of documents in the diagnostic button has been corrected.

Bug

- Offline update feedback incorrectly displays an error message, although the update is completed successfully.