New in version 4.0 of Camera Verifier 15000 series (14 December 2022)

Add QR code quiet zone configuration to settings.

Add "GS1 long distance scanning" & "GS1 logistic units" plugins.

Add option to analyse according to ISO/IEC 29158

Add error correction level parameter for PDF417.

Add per-character wide-to-narrow ratio parameters for linear codes.

Add pass/warn/fail status to per-character print gain parameters.

Add modulation & defects visualisations to scan reflectance profile.

Add millimetres scale to top axis of scan reflectance profile.

Add menu entry (under "View") & keyboard shortcut (F9) to open the scan reflectance profile window.

Add ability to switch between scan lines in scan reflectance profile window.

Recommend & check that a 06 aperture is used for linear HIBC codes.

Improve indices for nested linear parameters.

Improve decoding of Data Matrix codes with small or particularly large module sizes.

Improve decoding of inverted (light on dark) 2D codes.

Show print gain & per-character widths to a more sensible precision.

Show "Invalid" parameters in the fail status colour.

Fix spurious print gain values for Data Matrix codes with very large modules and/or internal alignment patterns.

Fix positions of per-character visualisations for linear symbologies with inter-character gaps, and EAN/UPC addon delimiters.

Fix positions of per-character visualisations for ITF-14.

Fix slight discrepancies in per-element & per-character widths.

New in version 3.1 of Camera Verifier 15000 series (06 September 2022)

Improve lookup results on standard reports.

Show per-element widths to a more sensible precision.

Update Danish & French translations.

Fix missing check on prefix for CIP product codes.

Fix spurious plugin results for invalid linear codes.

Fix interpreting the wrong time zone for some HIBC expiry date formats.

Fix spurious check digit parameter for ITF codes.

New in version 3.0 of Camera Verifier 15000 series (13 April 2022)

Add "Check for updates" (notification) icon to toolbar.

Add Portuguese (European) translation.

Add "GS1 UPC Human Readable" & "Portuguese Medicines" plugins.

Add right-click menu to copy the decoded message to the clipboard. If the message contains a valid URL, it can be opened with the default application.

Add a pass, warn or fail status to linear reflectance margin parameters.

Add matrix size parameter for Data Matrix codes.

Add encodation parameters for most symbologies, found under the details tab.

Add per-character and per-element parameters (Decodability, Defects, &c.) for linear codes.

Add per-scan structure parameter (under Details tab) for linear codes.

Add per-codeword parameters for Data Matrix & QR codes.

Add grid non-uniformity visualisations for Data Matrix & QR codes.

Add lookup feature for CSV files.

Add GS1 format report.

Only show update checker dialogue at startup to users permitted to modify the settings.

Data Matrix codes will receive a decode grade of 0 if any part of the nominal quiet zone is not within the scanned image.

Improve linear quiet zone visualisations.

Improve decoding Laetus codes when there are multiple in the image.

Record audit log export events in the audit log.

Reduce the likelihood of finding spurious Laetus codes by increasing the minimum height to 2.5 millimetres.

Update GS1 plugins as per GS1 General Specifications v22.0.

Updated Danish, Dutch, French, German, Italian, Polish, Russian & Spanish translations.

Improve decoding of noisy and low contrast QR codes.

Fix decoding of Laetus codes with 5 or fewer elements.

Fix inconsistent scan line thickness in parameter visualisations.

Fix missing check digit parameter for ITF-14 codes.

Fix "Provisional values" footnote not showing under ISO parameters when individual scan lines have failed.

Fix bugs in Data Matrix for C40 & Text modes involving upper shifts.

Fix date & time order in reports.

Fix incorrectly escaped characters in automatically generated filenames derived from the decoded message.

Fix various issues with decoding & verifying PDF417 and GS1 Composite codes.

New in version 2.4 of Camera Verifier 15000 series (29 November 2021)

Fix potential nonsense Laetus wide space count.

Improve decoding for QR codes with bad format information.

Fix verification of some small rectangular Data Matrix codes when using a small aperture.

Fix "Don't remind me again about this update" tick box.

New in version 2.3 of Camera Verifier 15000 series (25 October 2021)

Fix stitching of stacked Databar Expanded codes

New in version 2.2 of Camera Verifier 15000 series (04 October 2021)

Improve QR decoding.

Updated German translation.

Show an error or warning in GS1 plugins for any empty variable length application identifiers.

Improve GS1 data content checking of codes either missing required or containing unnecessary separator characters.

Fix user data items requiring a restart to be fully removed from settings.

Fix user data items from loaded scan files being added to subsequent scans.

Fix user data items from loaded scan files losing their pass/fail status.

Fix automatic detection of coloured bars/wide spaces in Laetus codes.

Fix misdecode of some linear symbols containing PDF417/composite start patterns.

Fix bogus linear reflectance margin parameter value.

Fix occasional spurious overall decode grade of 0 when one scan in a linear code fails the reference decode algorithm.

New in version 2.1 of Camera Verifier 15000 series (4 June 2021)

Update "Brazil Healthcare" plugin in accordance with resolution RDC 157/2017.

Fix invalid Code 39 check characters not always displayed correctly.

Updated Polish translation.

Fix divide-by-zero error with corrupted reader info.

Fix spurious calibration failures caused by skewed bounding boxes.

Improve linear decoding performance.

Fix crash when decoding certain Laetus codes.

Fix regression from version 2.0 in ITF decoding.

New in version 2.0 of Camera Verifier 15000 series (15 March 2021)

Decode of GS1 Composite Components - ISO/IEC 24723:2010.

Decode of Data Matrix Rectangular Extension (DMRE) - ISO/IEC 21471:2020.

Add Russian Dairy plugin.

Update GS1 plugins as per GS1 General Specifications v21.0.

Updated French translation.

Improve settings & calibration dialogue layouts.

Fix file saving being interrupted by trigger buttons or keyboard shortcuts.

Improve finding the full vertical extent of linear barcodes.

Improve short height rectangular Data Matrix verification.

Take fewer than 10 scans if the height of a linear code is sufficiently small that 10 scans would overlap.

New in version 1.1.0 of Camera Verifier 15000 series (26 October 2020)

Import old auto report settings even when installation directory changes

New in version 1.0 of Camera Verifier 15000 series (20 October 2020)

Significant performance improvements for 64-bit installations

Allow multiple reports to be automatically saved for each verified code

Use long time format for exported audit log timestamps

Updated permitted calibration symbols - newer cards will include Data Matrix

Display reader info in calibration dialogue

Minor fixes to Data Matrix grid positions

Improve GUI responsiveness when verifying particularly large 2D codes

Improve appearance of bounding boxes & parameter visualisations

Traditional Chinese translation

Updated Dutch, French, Japanese & Polish translations

Only disable CPU power saving when scanning, not at startup

Fix inconsistencies in GS1 plugins handling undersized & oversized codes

Fix trigger buttons not being disabled when a dialogue is open

Fix possible invisible bounding boxes when cropping the image

Fix user data bugs when using non-ASCII characters

Fix HIBC plugin failing lot/serial numbers containing dashes or dots

Fix spurious MSI Plessey codes appearing inside clock tracks

Fix some CSV files opened with MS Excel not displaying correctly

New in version 0.16.0 of Camera Verifier 15000 series (06 May 2020)

New

Add overall pass/fail judgement to reports for Laetus codes

Don't show minimum pass grade for Laetus codes

Updated Japanese, Russian & Dutch translations

Fix calibration expiry using incorrect time zones

Fix missing individual scan line parameters for X dimension & print gain

Fix some settings which were not displayed clearly

Fix interpretation of ISO 15434 macro characters 05 & 06 (Data Matrix)

Improve decoding of Laetus codes

New in version 0.15.0 of Camera Verifier 15000 series (30 March 2020)

New

Add MIL-STD-130N plugin

Better checking for already running instances

Don't show aperture for Laetus codes

Fix spurious new version message on changing 'shared config'

Show error if manual update check fails

New <Ctrl>+d keyboard shortcut for decode

Updated French & Polish translations Data Matrix RDA failure fixes Fix audit log using incorrect timezones Use local time for file name when auto saving New in version 0.13.5784 of Camera Verifier 15000 series (03 February 2020) New New "Ask User" plugin options - Japanese translation **Improvements** Fix incorrect bounding boxes for some linear codes Minor fixes to Data Matrix grid positions Fix handling of NULL characters in GS1 data New in version 0.12.5720 of Camera Verifier 15000 series (28 Nov 2019) New Image cropping - faster decoding speeds

Improvements

Fixed adjacent Code 39 symbol decode

Audit trail recording all changes and events

Decode of Laetus Pharmacode standard and minicode

QR grid calculation improvements.

Add left & rights quiet zones to reports (linear codes).

Add overall "Application Validation" results to reports.

Update GS1 plugins as per GS1 General Specifications v19.1.

Update "Russian Pharmacy" plugin in accordance with Decree 1118: crypto code (Al 92) should now be 44 characters; LOT and EXP are no longer permitted.

Moved calibration dialogue settings to new "Calibration" tab in settings.

Add "Allow scanning when calibration expired" configuration to settings.

Warn operators if the user calibration has expired before each scan.

Show aperture selection dialogue for 2D codes with no plugin recommendations.

Automatically show verification results from loaded scan files which contain only one code.

Group "Fixed Pattern Damage" parameters together (Data Matrix).

Show the number of passing, warning & failing parameters for grouped lists.

Add indices to individual parameter descriptions which are part of a set.

Improved descriptions & hints for various dialogues.

Fix incorrect ANSI letter grades for ISO grades very close to a boundary.

Fix inconsistent letter case of verifier serial numbers in reports.

Show horizontal scroll bar for unusually long plugin results.

New in version 0.11.5397 of Camera Verifier 15000 series (01 July 2019)

Improve Data Matrix decode with elongated L's and damaged clock modules
Improve decoding of QR codes with damaged alignment patterns
Improve QR grid calculation

Fix RMin/RMax for inverted QR codes

Save & restore window state & position of GUI

Improve decoding of minimum-height databar-14 stacked codes

New in version 0.11.5347 of Camera Verifier 15000 series (29 March 2019)

Fixed decode of linear codes sometimes not finding full height of the code.

Added Luhn check digit plugin

Updated Polish translation

Increased tolerance for "Wide:Narrow Ratio" checks

New in version 0.11.5294 of Camera Verifier 15000 series (27 February 2019)

Add minimum pass grade configuration to settings.

Always show application validation results (including if not applicable).

Add individual scan line parameters for linear codes (expandable under each averaged result).

Draw the selected code outline with the overall pass/fail status colour.

Russian translation.

"Russian Pharmacy" plugin, for healthcare GS1 DataMatrix codes.

Improve report descriptions.

Improve 2D code module visualisations.

Improve linear code scan line visualisations.

Improve scan reflectance profile graphics.

Improve GS1 data content checking on codes containing unnecessary function 1 characters.

Remove GS1 data content warnings regarding the order of fixed and variable-length application identifiers for all 2D codes.

Update GS1 plugins as per GS1 General Specifications v19.0.

Update status bar when saving or loading scan files.

Fix incorrect print gain values being shown for particularly bad codes.

Fix Data Matrix bugs in ANSI X12 encoding.

Improve decoding of Data Matrix codes with defects in clock tracks modules.

Fix duplicated auto report saving when cancelling decode.

Move update checker into separate process to avoid delaying program startup.

Enable GS1 healthcare retail and pharmacy distribution plugins by default.

Restrict generation of append-able reports to those that support it.

Stitch together multi-row DataBar codes.

New in version 0.10.5011 of Camera Verifier 15000 series (08 October 2018)

Fix possible Data Matrix crash.

Improve linear decoder for EAN-13 with add-ons.

Fix linear finder for codes that are vertically close to each other.

New in version 0.10.4919 of Camera Verifier 15000 series (10 September 2018)

Fix loading of user logon profiles

Reset user data before loading a scan

Increase auto save/report filename length to 100

Improve Data Matrix noise immunity

Improve calibration form layout

Fix CSV quoting and empty strings

New in version 0.10.4810 of Camera Verifier 15000 series (04 July 2018)

Improve decoding performance of noisy linear & QR codes.

Tweaks to linear code finding & decoding.

Improve QR decoding, and decode more QR versions (15-40).

Improve Data Matrix decoding speed.

Improve accuracy of Data Matrix verification on very small codes.

'Common configuration' and 'User login' settings.

Calibration verification scan is taken before 'Calibration Successful' is shown.

Polish translation. Updates for Spanish & French translations.

Add user & computer names to reports.

Add page numbers to footer of PDF report.

Add new "Pharma Pack" plugin, for healthcare GS1 DataMatrix codes.

Update GS1 plugins as per GS1 General Specifications v18.0, and other improvements to data content checking.

Fix incorrect symbology specification in reports for GS1-128 and GS1 DataBar linear codes.

New in version 0.9.4559 of Camera Verifier 15000 series (21 December 2017)

Implement fractional grading for linear bar codes, as per ISO/IEC 15416:2016.

Don't display QR codes that can't be decoded.

Fixes for German translation.

Indian Healthcare plugin.

Allow ±2% tolerance on X/Y-dimension in GS1 plugins.

Improve QR decoding.

Set trustworthiness of QR verification parameters.

Add Reflectance Margin parameter for linear codes.

Fix saving of auto-save report append setting.

Fix scan lines for linear verification being taken through QR code.

Fix linear print gain of individual verification scans being reported as the average print gain of the initial decode pass.

New in version 0.8.4518 of Camera Verifier 15000 (08 November 2017)

Czech translation.

Automatic headers for CSV reports.

Allow GS to be used instead of F1 in 2D codes.

Add image of code to PDF and HTML reports.

Data Matrix ISO parameter visualisations for UEC, FPD, reflectance margin, contrast uniformity.

Improve Data Matrix and QR reference decode compliance.

Calibration reminders.

New in version 0.7.4362 of Camera Verifier 15000 (06 June 2017)

Linear barcode finder speed improvements.

Data Matrix improvements for varying reflectance levels.

German and Italian translations.

Always show option for plugins.

Plugins for GS1 symbol specification tables 1, 2, 3, 6, 8, 9, 10, 11.

Store user name, host name and operating system in scan files.

Fix PDF report creation on Windows XP.

Report for detailed plugin results.

Aperture selection list for conflicting aperture recommendations from plugins.

Coloured code outlines reflecting passing/failing codes

New in version 0.6.4166 of Camera Verifier 15000 (31 March 2017)

Fix Data Matrix bugs in C40 and EDIFACT encodings.

Update drivers to meet the Windows 10 requirements for kernel-mode code signing.

New in version 0.6.4068 of Camera Verifier 15000 (30 January 2017)

Fixes a bug trying to create a report of a code with a wide to narrow ratio parameter.

New in version 0.6.4029 of Camera Verifier 15000 (21 December 2016)

Allow Unicode file names for saved scans and reports.

Respect imperial units setting for reports and plugins.

Improve HTML report.

New PDF report, handle Unicode fonts and layout automatically.

Show wide-to-narrow ratio for linear codes where it applies.

Application Validation area to summarise plugin results.

HIBC plugin.

Chinese translation.

Warn when reader calibration is missing.

Improve plugin display area.

Small bug fixes and improvements.

New in version 0.5.700 of Camera Verifier 15000 (30 June 2016)

Korean translation

Improved display of special characters in reports and plugins

Fix report time zone getting garbled

QR and Data Matrix decoding fixes and improvements

Auto printing

New plugins: Performance Qualification, UTF-8, Brazilian Healthcare

Lots of small fixes and improvements.

New in version 0.4.3559 of Camera Verifier 15000 (23rd December 2015)

User data fixes and improvements, including "Default on New" option.

QR thresholding and grid calculation improvements.

ITF and Code 39 check digit plugins.

Other small fixes and improvements.

New in version 0.4.3475 of Camera Verifier 15000 (25th August 2015)

Contrast uniformity and reflectance margin module visualisation for QR.

Report printing.

Save/print last report.

Disable OCR for Code 128.

Fix Data Matrix C40 decoding corner cases.

Many small bug fixes.

New in version 0.3.3445 of Camera Verifier 15000 (26th March 2015)

Danish, Slovenian and Spanish translations. Updates and improvements to all other translations.

Visualisation for ISO parameters. Clicking on an ISO parameter displays a coloured overlay over the code that shows individual module/scan grades. Currently implemented parameters:

Linear: All.

Data Matrix: Modulation.

QR: Modulation, unused error correction, version/format information fixed pattern damage.

Zoom mode: Clicking on a code once selects and verifies it. Clicking on it again zooms to fit the current window.

Many other bug fixes, performance improvements and small features.