

Version History NPOS Software

Software Version 4.6n build 16350

Valid from 04.10.2019 last change 27.05.2025



1. NPOS Version 4.6n 16350 (28.05.2025)

1.1.Improvements

- **Automatic System Check on Startup:** If the device detects a read-only state on startup, the system now automatically runs a repair check to maintain stability and prevent file system issues.
- **Support for WORM Network Server:** Our software now supports WORM (Write Once, Read Many) network drives. Optimized background checks prevent write operations that could cause file system errors, improving compatibility and ensuring data integrity compliance.

2. NPOS Version 4.6m 16350 (28.01.2025)

2.1.Implemented Functions

- N120 single channel: shows always lid 80 in case of ABR

2.2.Improvements

- Check all network folder every 5 min in order to keep them alive
- N120: do not move horizontal motor with maintenance stick
- During Linux setup, set eMMC to pSLC mode and enable automatic eMMC BKOPS

2.3.Resolved Issues

- In case of Air Bubble Recognition, corrected wrongly shown lid 80 / 140.

3. NPOS Version 4.6L 16350 (19.11.2024)

3.1.Implemented Functions

General

- N50 GO: Text for Upgrade missing

CFR21 Software:

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- CFR21: audit trail for backup missing

3.2.Improvements:

- Add new screensaver video
- Implement eMMC maintenance
- Fix Japanese translations
- Check all network folder every 5 min in order to keep them alive

4. NPOS Version 4.6k 16350 (13.06.2024)

4.1.Implemented Functions

General (affects all NanoPhotometer® models):

- N/A

5. NPOS Version 4.6j 16350 (29.04.2024)

5.1.Implemented Functions

General (affects all NanoPhotometer® models):

- Nucleic Acids and Concentration Methods: New measurement unit added (nmol/l)
- Automatic Date and Time synchronization via NTP server
- Stored Results: New back button added when IDS/JSON files are opened

CFR21 Software:

- Additional CFR21 role added: Viewer – for auditing purposes
- New preference added: Administrators can enable/disable permission for Power Users to add new Users.

5.2.Improvements

- WiFi functionality improved: Expanded list of SSIDs displayed

5.3.Resolved Issues

- Air Bubble Recognition function improved
- HP printer support upgraded

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6. NPOS Version 4.6f 16350 (26.04.2023)

6.1. Implemented Functions

N/A

6.2. Improvements

N/A

6.3. Resolved Issues

General (affects all NanoPhotometer models)

- Kinetics application improved with regards to duration of kinetics measurements
- Intermittent disruptions in generating PDF reports have been resolved

7. NPOS Version 4.6e 16350 (30.01.2023)

7.1. Implemented Functions

N/A

7.2. Improvements

N/A

7.3. Resolved Issues

Kinetics: Added missing special characters as sample names

8. NPOS Version 4.6d 16350 (20.01.2023)

8.1. Implemented Functions

General (affects all NanoPhotometer models):

- Extend REST API Push Service for general LIMS integration

NanoPhotometer® N120:

- N120: New multi-channel method: Wavelength

8.2. Improvements

General (affects all NanoPhotometer models):

- Make remote access via pagekite configurable via magic file
- Additional special characters available as sample names
- Kinetics: rounding of Slope value and duration

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- Updated HP Printer Driver to HPLIP 3.22.10

8.3. Resolved Issues

General (affects all NanoPhotometer models):

- Stored Results: handling of dot during file rename

NanoPhotometer® N120:

- Wavescan: Opening the lid in a lid 80 measurement

9. NPOS Version 4.6c 16350 (25.08.2022)

9.1. Implemented Functions

NanoPhotometer® N120:

- Protein Assay multichannel mode: New assay type Custom

9.2. Improvements

General (affects all NanoPhotometer models):

- Compatibility for Dymo 550 and 5XL printer

9.3. Resolved Issues

General (affects all NanoPhotometer models):

- Test dyes removed from preprogrammed dye list

NanoPhotometer® N120:

- Windows App: Fix in Protein Assay tab bar
- Warning message: Fix for editing more than 12 sample names

10. NPOS Version 4.6b 16350 (21.07.2022)

10.1. Implemented Functions

N/A

10.2. Improvements

N/A

10.3. Resolved Issues

NanoPhotometer® N120:

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- Wrong dilution factors shown in graphical user interface after reset.

11. NPOS Version 4.6a 16350 (20.04.2022)

11.1. Implemented Functions

N/A

11.2. Improvements

- Updated HP printer driver

11.3. Resolved Issues

N/A

12. NPOS Version 4.6 16350 (07.03.2022)

12.1. Implemented Functions

N/A

12.2. Improvements

N/A

12.3. Resolved Issues

- Copy / move data to USB flash drive with too less storage
- Closing / opening cuvette slider (NP80)

13. NPOS Version 4.5b 16350 (16.02.2022)

13.1. Implemented Functions

N/A

13.2. Improvements

N/A

13.3. Resolved Issues

NanoPhotometer® N120:

- N120: Configuration Change

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14. NPOS Version 4.5 16350 (27.01.2022)

14.1. Implemented Functions

N/A

14.2. Improvements

General (affects all NanoPhotometer models):

- Available SMB protocols: SMB 3.1, SMB 3.0, SMB 2.1, SMB 2.0, and SMB 1.0 (hardware version C.2)

14.3. Resolved Issues

General (affects all NanoPhotometer models):

- Assistance/Selftest: Folder list not shown in save dialog
- Handling of initialization / selftest with lid open
- Protein Assay / Standard Curve method: scaling of axis

Apps for control devices:

- Mac: OD600 method: selection options for multiplier parameter not shown
- Android Tablet: Toggle switches in Protein Assay and Standard Curve sometimes not working
- Android Tablet: Stored Results/Methods: Files sometimes not shown

15. NPOS Version 4.4 16326 (22.12.2021)

15.1. Implemented Functions

CFR21 Software:

- Search Option in Audit Trail
- Audit trail available on touchscreen, sorted by year. Saving possible up to 50.000 entries. No direct printing of audit trail in NPOS software.

15.2. Improvements

General (affects all NanoPhotometer® models):

- Change of default dye parameter according to dye manufacturer
- Improved screensaver with new movie
- Improved translations
- Improvement of rounding numbers
- New and improved warning messages for easier handling

CFR21 Software:

- Improvement of Audit Trail entries (NanoPhotometer booting, opening of Stored

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Method and saving in backup folder/control device)

15.3. Resolved Issues

General (affects all NanoPhotometer® models):

- Correct folder list in save dialog of Assistance/Selftest
- Correction for remote access in Assistance
- Handling of special characters
- New time setting sometimes not working in Preferences
- Optimization of load mask
- Protein UV method: No dye selection if Custom Protein factor is selected
- Protein UV method: No dye selection if OD1 factor is selected
- Result table sometimes not displayed
- Stored Methods/Results: File directory: folder/files sometimes not displayed

CFR21 Software:

- Login not possible with password containing some special characters

Apps for control devices:

- Smart Phone: Manual Dilution sometimes not displayed in parameter
- Tablet: Show print icon only if printer is connected
- Tablet: Resizing of graph zoom sometimes not working
- Windows App: N120 sample map sometimes not opening

16. NPOS Version 4.3e 15670 (18.08.2021)

16.1. Implemented Functions

N/A

16.2. Improvements

- Improvement of USB connection (NanoPhotometer / computer)

16.3. Resolved Issues

N/A

17. NPOS Version 4.3d 15670 (20.04.2021)

17.1. Implemented Functions

N/A

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17.2. Improvements

N/A

17.3. Resolved Issues

General (affects all NanoPhotometer® models):

- Protein UV method: Calculation of DOL

18. NPOS Version 4.3c 15670 (30.03.2021)

18.1. Implemented Functions

N/A

18.2. Improvements

N/A

18.3. Resolved Issues

- Concentration alerts

19. NPOS Version 4.3b 15670 (10.03.2021)

19.1. Implemented Functions

General (affects all NanoPhotometer® models):

- Screensaver videos
- Protein Assay and Standard Curve method: remeasure of standard curves in Stored Methods
- Formula editor in Wavelength method
- New Assistance features: Self-Test, User Manual and Remote Access

NanoPhotometer® N120:

- New multi-channel methods: Protein Assay and Wavescan
- Manual change of Sample IDs in Sample Map

CFR21 Software:

- Power User can read audit trail

19.2. Improvements

General (affects all NanoPhotometer® models):

- New and improved warning messages for easier handling
- Protein UV method: new protein factor Custom ($1/\epsilon$); extended (four) decimal places for Extinction Coefficient

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- Protein Assay and Standard Curve method: show by default three concentrations for curve fit Regression 2nd Order
- Protein Assay method: default values for Baseline Correction
- Adjusted format for autosave and audit trail file names
- Improvement Initialization Test
- Updated HP printer driver

NanoPhotometer® N120:

- Performance improvement
- Translations for multi-channel methods
- Show .csv files in Stored Methods

CFR21 Software:

- New warning message for administrator password
- Additional unique audit trail Entries

Apps for control devices:

- Improved saving on smart phone / tablet: data files are saved in the Download folder (Android) or NanoPhotometer folder (iOS) for easy access

19.3. Resolved Issues

General (affects all NanoPhotometer® models):

- Issues with parameter settings and layout
- Workflow issues for inactive / active blank and sample button including warning messages
- Auto Sample sometimes not working
- Clickable area not working: alert icons in table of Nucleic Acid / Protein UV method
- Show integer numbers for wavelength and time settings
- Keyboard randomly not shown
- WiFi status on home screen
- Show correct WiFi status for connection failed
- Network Folder: issue with permissions; show correct network status for wrong network path
- Connection of static IP address
- Time Zone dropdown loads too slow
- Cuvette port sometimes not closing
- Fix of Chinese, Japanese and Portuguese translation issues
- Disable DNS server
- Overlay graphs not working after opening Assistance
- File directory: issues with white frame for folder selection; copying subfolders
- PDF files: layout issues, show correct table columns depending on method, show

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correct decimal places for all values

- Issues with results %Transmission for cuvette measurements
- Protein Assay / Standard Curve method: show N/A for factor for 2nd Order Regression standard curves (Excel / PDF), opened .ids and .json files show saved standard curve with correct values, corrupt autosave file

NanoPhotometer® N120:

- Sample Map selection: change of sample loading orientation or switching between single and multi sample clears Sample Map; selection issues for vertical mode, multiple plates and warning message "Position A1 must be selected"
- Sample ID setting on Sample Map: issues on vertical orientation; Sample ID setting in opened .json
- White frame issue on Sample Map / result screens after remeasure bad blank
- Hidden Blank: show correct Sample IDs (BLK01...); show correct warning messages on inactive sample button
- Bad blank warning: sort by Sample ID
- Multi-channel result screens: show correct number format on concentration grid, correct wavelength range on graph grid
- Single result overview empty when swiping screens during measurement
- Show in graph pop up grid position and not consecutive number
- Opened .ids files with selected data saved (multi-channel method): show graphs in grid and Sample IDs in Sample Map
- Sample ID drafts (.csv) – show correct help text in .csv files for exported Sample IDs
- Show correct warning messages in case of invalid Sample ID definition in imported .csv file
- Do not stop measurement for imported Sample ID (.csv vertical mode and selection)
- Parameter not shown in opened .json navigating over page indicator
- Bad reaction on page indicator
- Use correct lid factor in case of dye measurement in Nucleic Acid / Protein UV multichannel method
- Layout issue in Stored Methods/Results after saving in multichannel method
- Illuminate red LEDs correctly after stopped blank
- Optimize cryo label prints on Dymo printer for multichannel methods

Apps for control devices:

Mac computer app:

- Layout issues: Auto Sample button, Sample ID pop up
- Clickable area not working: units dropdown in Nucleic Acids and Protein UV method; alert icons in result view
- Save via Home button is not closing method

Windows computer app:

- Protein Assay / Standard Curve method: toggle switches for replicate selection not

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- working, mouse scrolling issues for result view
- Protein UV multi-channel method: show correct value for A260/A280 in vertical tab bar
- Phone app (iOS and Android): show correct parameter depending on NanoPhotometer® model (opened method and Stored Methods)
- No back button in Stored Results/Stored Methods or opened .ids or .json
- Kinetics save on home button not working

CFR21 Software:

- Full functionality of CFR21 software without power user
- Audit trail folder only accessible via file server
- Language of audit trail is English independent from language setting
- Use Login Name and not User ID in audit trail
- Layout issues: selected options need to be highlighted (in method color) and greyed out if no selection is possible
- User rights: do not allow user to change parameter in loaded .ids files and Stored Methods (.json); User can only measure defined Sample IDs (multi-channel method) in an opened Stored Method (.json);
- Unique login and group names to avoid problems with user rights
- Show correct file name/path of .ids PDF and Excel document header
- Screensaver can sometimes not be deactivated / display darkened
- Adding folder to My NanoPhotometer in opened .ids file ends in load mask
- Windows app: forced log off ends in load mask; dye tab in vertical tab bar sometimes not shown in opened Stored Method

20. NPOS Version 4.2h 14900 (29.06.2020)

20.1. Implemented Functions

N/A

20.2. Improvements

- Activation of SMB2 for new main PCBs

20.3. Resolved Issues

General (affects all NanoPhotometer® models):

- File Server: writing permissions on computer; file server access problems after updating to NPOS 4.X
- Chinese: Date & Time not shown completely in PDF

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21. NPOS Version 4.2g 14900 (31.03.2020)

21.1. Implemented Functions

N/A

21.2. Improvements

N/A

21.3. Resolved Issues

General (affects all NanoPhotometer® models):

- Deactivation of screensaver videos (final approval missing)

22. NPOS Version 4.2f 14900 (24.01.2020)

22.1. Implemented Functions

N/A

22.2. Improvements

N/A

22.3. Resolved Issues

General (affects all NanoPhotometer® models):

- Chinese / Japanese language setting: PDF saving and printing not working for NanoPhotometer® with new main PCB

23. NPOS Version 4.2e 14900 (17.12.2019)

23.1. Implemented Functions

N/A

23.2. Improvements

General (affects all NanoPhotometer® models):

- Initialization test: no measurement with open lid

23.3. Resolved Issues

General (affects all NanoPhotometer® models):

- Saving issue after save failed on a read only USB flash drive

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24. NPOS Version 4.2d 14900 (15.11.2019)

24.1. Implemented Functions

N/A

24.2. Improvements

N/A

24.3. Resolved Issues

NanoPhotometer® N120:

- Air Bubble Recognition of multi-channel methods not working correctly

25. NPOS Version 4.2c 14900 (07.11.2019)

25.1. Implemented Functions

N/A

25.2. Improvements

N/A

25.3. Resolved Issues

General (affects all NanoPhotometer® models):

- Excel of Wavescan method: show consistent peak position on all Excel sheets

26. NPOS Version 4.2b.14900 (29.10.2019)

26.1. Implemented Functions

N/A

26.2. Improvements

NanoPhotometer® N120:

- Improvement of measurement head movement

26.3. Resolved Issues

CFR21 Software:

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- Audit trail: show consecutive IDs (no restart at 1)

27. NPOS Version 4.2.14900 (04.10.2019)

27.1. Implemented Functions

N/A

27.2. Improvements

- CFR21 software: second disclaimer for liability added
- Warning Messages: change of ratio alert A260/A280, Confirmation message for deleting files

27.3. Resolved Issues

General (affects all NanoPhotometer® models):

- Optimize booting time
- Keyboard sometimes not opening
- Hanging load masks: graph overlay; saving of selected data
- Allow lower and upper case extensions for .ids files
- No Auto Sample function for cuvette mode (NP80)
- Missing text "Selected Time" for time change
- File server: remember user accounts; lock button not working; writing permissions on computer
- Network Folder: password sometimes lost; warning message for allowed characters for Network Folder Nickname
- Excel: range of x-axis for graph on values sheet
- Cryo label print on Dymo 400 and Dymo 450 Turbo not working

NanoPhotometer® N120:

- Home button not shown after tick box selection
- Layout issues for single result overview
- White frame selection on Sample Map
- Opened .ids files: display of cells without results
- Warning message for selected cells without Sample IDs
- Consistent parameter setting changing between single- and multi-channel option
- Actions for file tree in Sample ID pop up / import .csv files: copy, delete and rename
- Excel of single-channel Nucleic Acid / Protein UV: graph sheets missing

CFR21 Software:

- Allow lower and upper case extensions for .lic files (license file)

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- Activation of CFR21 software in other language than English
- Opened Protein UV Stored Method shows wrong wavelength parameter

Apps for control devices:

- Layout issue on Windows computer: white square instead of x for closing single result overview
- Concurrency issue opening .ids or .json when control device is active
- iPhone: saving on control device
- Android app request to read permission of phone state
- Android apps: remove message "Leave this page" on control device back button when saving data on control

28. NPOS Version 4.2.14756 (27.08.2019)

Initial release of CFR21 Software