

## Easy on-PC Version History

This document lists all Easy on-PC software releases. Some versions haven't been distributed or only for selected customers. The changes though are cumulative, that means that changes introduced in a version are also included in later versions.

Version Date	Description
<b>(EOPC)</b> <b>V03.07.01.09</b>  <b>June 2020</b>  Compatible with EasyOne Air Firmware V1.14.0	<ul style="list-style-type: none"> <li>• Compatibility update for EasyOne Pro/LAB software release V03.07.01.09</li> </ul> <p><b>Important note:</b> When Easy on-PC and EasyOne Pro/LAB devices use a shared database, all products must have the same version of software installed.</p>
<b>(EOPC)</b> <b>V3.07.00.02</b>  <b>March 2020</b>  Compatible with EasyOne Air Firmware V1.14.0	<ul style="list-style-type: none"> <li>• Harmonization with lung function standards and new predicted values:               <ul style="list-style-type: none"> <li>○ Introduction of Z-score graph according to the ATS report guideline 2017</li> <li>○ New predicted values “Kainu (Finland)”</li> </ul> </li> <li>• Improved usability and functionality for lung function testing:               <ul style="list-style-type: none"> <li>○ Improved recognition of exhalation for SVC tests</li> </ul> </li> <li>• Centralized User Management and Improved Cybersecurity:               <ul style="list-style-type: none"> <li>○ Ability to integrate with your Active Directory for secure &amp; central user management</li> </ul> </li> <li>• General improvements and bug fixes:               <ul style="list-style-type: none"> <li>○ Fixed an issue where autocompletion incorrectly completes age entry</li> <li>○ Fixed an issue where HL7 orders cannot be sent to EasyOne Air</li> </ul> </li> </ul>
<b>(EOPC)</b> <b>V3.06.00.23</b>  <b>December 2019</b>  Compatible with EasyOne Air Firmware V1.13.0	<ul style="list-style-type: none"> <li>• General Improvements and bug fixes:               <ul style="list-style-type: none"> <li>○ Fixed an issue where for high resolution displays the scaling was not adapted correctly</li> <li>○ Fixed a synching issue with EasyOne Air, where in some rare cases trials were not synchronized to EasyOne Connect</li> </ul> </li> </ul>

Version Date	Description
<p><b>(EOPC)</b> <b>V3.05.01.07</b></p> <p>March 2019</p> <p>Compatible with EasyOne Air Firmware V1.10.2</p>	<ul style="list-style-type: none"> <li>• Improved Cybersecurity <ul style="list-style-type: none"> <li>○ Possibility to define your own database password</li> <li>○ Option to enforce strong passwords for user logins</li> <li>○ Option to enforce password expiration for user logins</li> </ul> </li> <li>• Improved FVC and FVL Testing Functionality <ul style="list-style-type: none"> <li>○ New setting to enforce 6s expiration</li> <li>○ New setting to show a warning prompt if end of test criteria is not fulfilled</li> <li>○ Generally improved messaging (for details see “AppNote MessageNo V08R.pdf”)</li> </ul> </li> <li>• General Improvements on Usability <ul style="list-style-type: none"> <li>○ Tutorial movies can now be played directly in the software</li> </ul> </li> <li>• General Improvements and bug fixes <ul style="list-style-type: none"> <li>○ Danish and Norwegian are now supported as software language</li> <li>○ Fixed an issue where the PDF report was empty for Chinese language</li> <li>○ Fixed an issue where the VC pre value is used in the FVC post test</li> <li>○ Extended number of saved error codes from three to seven <b>Attention:</b> this might affect your XML interface (for details see “AppNote MessageNo V08R.pdf”)</li> </ul> </li> </ul>
<p><b>(EOPC)</b> <b>V3.04.00.23</b></p> <p>April 2018</p> <p>Compatible with EasyOne Air Firmware V1.9.1</p>	<ul style="list-style-type: none"> <li>• Improved data handling and performance <ul style="list-style-type: none"> <li>○ Keep your historic data by automatically importing existing tests as pdf’s and attach them to the patient history in EasyOne Connect</li> <li>○ Further increased database performance to handle extremely large databases containing more than 100’000 patients</li> </ul> </li> <li>• General Improvements and Bugfixes <ul style="list-style-type: none"> <li>○ Fixed an issue where the user feedback was not correct on SVC tests with heavy tidal breathing</li> <li>○ Better allignment of FV and VT curve on standard report</li> <li>○ Generally improved workflow of online tests in combination with EasyOne Air</li> </ul> </li> </ul>

Version Date	Description
<p><b>(EOPC)</b> <b>V3.03.00.11</b></p> <p>November 2017</p> <p>Compatible with EasyOne Air Firmware V1.8.0</p>	<ul style="list-style-type: none"> <li>• Improved Provocation Testing Functionality                             <ul style="list-style-type: none"> <li>○ Define and modify provocation protocols</li> <li>○ Added exercise provocation as new standard protocol</li> </ul> </li> <li>• Improved Reporting and Trending Capabilities                             <ul style="list-style-type: none"> <li>○ Enter and trend external FeNO, MIP, MEP, SpO2 values add them to spirometry report and or transfer the values to the EMR system</li> <li>○ Automatically trend parameters of the last 5 tests on the standard PFT reports</li> <li>○ Possibility to visualize more parameters on the standard report</li> <li>○ Show Z-Score and %predicted simultaneously on all standard reports</li> <li>○ Generally improved report layouts by dynamically arranging graphs and tables</li> </ul> </li> <li>• Improved Functionality with EasyOne Air                             <ul style="list-style-type: none"> <li>○ Send EMR orders to EasyOne Air and process orders offline on EasyOne Air</li> <li>○ Improved ease of use for EasyOne Air firmware updates</li> <li>○ Fixed issue where in some cases EasyOne Air updates failed</li> <li>○ Fixed issue where in some rare cases results could not be synchronized with EasyOne Air</li> </ul> </li> <li>• General Improvements and Bugfixes                             <ul style="list-style-type: none"> <li>○ Support Thai Calender Format</li> <li>○ Fixed in the GDT interface where returning post tests with best trial setting failed</li> <li>○ Fixed an issue where changes in the configuration were only applied after a restart of the application</li> </ul> </li> </ul>
<p><b>(EOPC)</b> <b>V3.02.00.06</b></p> <p>July 2017</p> <p>Compatible with EasyOne Air Firmware 1.7.0</p>	<ul style="list-style-type: none"> <li>• Improved reporting capabilities:                             <ul style="list-style-type: none"> <li>○ Comments can be added much faster</li> <li>○ Define standard text blocks and quickly add them to the report when needed</li> <li>○ The highlighting color used to show abnormal results can now be defined in the configuration (e.g. black, red, etc.)</li> </ul> </li> <li>• Connectivity performance improvements:                             <ul style="list-style-type: none"> <li>○ Increased the speed of an EasyWare database import</li> <li>○ Fixed an issue with the import of very large EasyWare databases</li> <li>○ Drastically increased the speed of loading the EMR order list</li> <li>○ Fixed an issue where EMR orders could not be closed, when certain special signs were used in the comment section</li> <li>○ EasyOne Air Firmware can now easily be updated via EasyOne Connect</li> </ul> </li> </ul>

Version Date	Description
(EOPC) <b>V3.01.00.01</b>  May 2017	<ul style="list-style-type: none"> <li>• Connectivity to EasyOne Air               <ul style="list-style-type: none"> <li>○ Full data synchronization with EasyOne Air</li> <li>○ Online curve display using EasyOne Air is now available</li> <li>○ Renaming of Easy on-PC software to EasyOne Connect with adjusted icon and installation path</li> </ul> </li> </ul> <p><b>Important Note:</b> <i>The name change might affect existing interfaces to third party solutions. In case of a software update the installation path and file name remain unchanged. In case of a fresh installation the new installation path and file name will be set as default option. It is possible to change the default installation path during the installation process.</i></p> <ul style="list-style-type: none"> <li>• Improved Calibration Check functionality               <ul style="list-style-type: none"> <li>○ Flow targets now also meet the OSHA disability standard</li> <li>○ Additional multi flow calibration check option requiring only one trial</li> </ul> </li> <li>• Improved performance and bug fixes               <ul style="list-style-type: none"> <li>○ Faster patient database search</li> <li>○ Better handling of patients with birthday 29th of February</li> <li>○ Individual patients can now be exported from MS SQL server database</li> <li>○ Fixed an issue where in some cases the calibration check data could not be exported</li> </ul> </li> </ul>

Version Date	Description
<p><b>(EOPC) V2.02.00.14</b></p> <p>August 2016</p>	<ul style="list-style-type: none"> <li>• Z-score and improved reporting functionality:                             <ul style="list-style-type: none"> <li>○ Z-score is now available on the display and on the report</li> <li>○ It is now possible to only show acceptable trials on the report</li> <li>○ Trial time can now be shown on the report</li> </ul> </li>   <li>• Improved data handling:                             <ul style="list-style-type: none"> <li>○ It is now possible to directly export and import individual patients with all tests</li> </ul> </li>   <li>• Improved cyber security:                             <ul style="list-style-type: none"> <li>○ In order to better control access, permissions of different user groups can now be adjusted directly</li> <li>○ User can set custom installation path for Easy on-PC</li> <li>○ Additional logging of patient search activity</li> <li>○ Improved traceability in audit trail</li> </ul> </li>   <li>• Bug fixes                             <ul style="list-style-type: none"> <li>○ Easy on-PC compatibility with Windows XP</li> <li>○ Fixed report error when all trials have been deleted</li> <li>○ Fixed error when searching patients in Allscripts</li> <li>○ Fixed unwanted duplication of patient records during import</li> </ul> </li> </ul>
<p><b>(EOPC) V2.01.00.08</b></p> <p>March 2016</p>	<ul style="list-style-type: none"> <li>• Improved connectivity:                             <ul style="list-style-type: none"> <li>○ Switching from EasyWare to EasyWare Pro (Easy on-PC) is now much easier. EasyWare databases can now be imported in Easy on-PC and EasyOne Pro / LAB.</li> <li>○ Summary interpretation of several tests is now available in the HL7 message</li> <li>○ “% Pre/Post” change is now available in the HL7 message</li> <li>○ Extended XML export (Technician, Reviewer, Modified)</li> <li>○ Bug fix in EMR review workflow</li> <li>○ Bug fix when SQL server is not connected during software start up</li> </ul> </li>   <li>• Improved performance:                             <ul style="list-style-type: none"> <li>○ Faster loading time for biological quality control</li> </ul> </li> </ul>

Version Date	Description
<b>(EOPC) V2.00.01.04</b>  Sept. 2015	<ul style="list-style-type: none"> <li>• Improved data performance and patient data encryption               <ul style="list-style-type: none"> <li>○ Support of MS SQL Server database</li> <li>○ Improved performance for large databases and heavy multi user-access</li> <li>○ Improved encryption and support of SSL connections (MS SQL Server)</li> <li>○ Faster merging of databases</li> </ul> </li> <li>• Windows 10 Ready</li> <li>• Support of new predicted publications and improved usability               <ul style="list-style-type: none"> <li>○ New publication: JRS (Japan)</li> <li>○ New publication: Ip (Hong Kong)</li> <li>○ New publication: Chhabra (India)</li> <li>○ Fixed “out of memory” issue when updating predicted of tests</li> </ul> </li> <li>• Additional language support               <ul style="list-style-type: none"> <li>○ Added Chinese language</li> <li>○ Added Swedish language</li> </ul> </li> <li>• Improved XML export               <ul style="list-style-type: none"> <li>○ Added system interpretation</li> <li>○ Fixed “out of memory” problems for xml export of large databases</li> </ul> </li> </ul>
<b>(EOPC) V1.9.0.18</b>  Sept. 2014	<ul style="list-style-type: none"> <li>• Improved Design &amp; Usability               <ul style="list-style-type: none"> <li>○ New clean and simple user interface</li> <li>○ Improved test acceptability &amp; test messaging</li> </ul> </li> <li>• More Functionality               <ul style="list-style-type: none"> <li>○ Delete individual tests</li> </ul> </li> <li>• Improved Connectivity               <ul style="list-style-type: none"> <li>○ Improved XML connectivity workflow (direct printing)</li> <li>○ Concurrent message handling improved for XML and HL7 connectivity</li> <li>○ Support EasyOne screen connector and cradle for Windows 8</li> <li>○ Fixed connectivity issue with EasyOne</li> <li>○ Fixed connectivity issue with Allscripts Professional / Touchworks</li> </ul> </li> </ul>
<b>V1.8.0.14</b> March 2014	<ul style="list-style-type: none"> <li>• HL7 supported</li> <li>• Redesigned report layouts</li> <li>• The trend graph is now available for custom reports</li> <li>• New spirometry predicted set Separ 2013, extended NHANES-III extrapolation up to age 95</li> <li>• Fixed bug where predicted values were not available for ethnicity NE/SE-Asian</li> <li>• USB 3.0 for hand held sensor supported</li> </ul>
<b>V1.7.6.4</b> Sept. 2013	<ul style="list-style-type: none"> <li>• Option to automatically lock screen when user is inactive for X minutes (21 CFR part 11)</li> <li>• Option to enter a patients year of birth instead of full Date of Birth</li> <li>• Latest Screen-Connector and Cradle drivers supporting Windows 8</li> <li>• Fixed: Software not responding after flow sensor was connected</li> </ul>
<b>V1.7.4.8</b> June 2013	<ul style="list-style-type: none"> <li>• Redesigned DLCO screen</li> <li>• Improved User Login supports               <ul style="list-style-type: none"> <li>○ UserID and password</li> <li>○ User roles with different privileges</li> </ul> </li> <li>• Allow loading predefined configuration</li> <li>• Also test data of previous SW versions can be imported</li> <li>• Option to enter age instead of Date of Birth</li> </ul>

Version Date	Description
<b>V1.6.0.10</b> February 2013	<ul style="list-style-type: none"> <li>• Pediatric specific improvements             <ul style="list-style-type: none"> <li>○ Automatically zoom small spirometry curves</li> <li>○ “Birthday cake” children incentive added</li> <li>○ Acceptability criteria simplified for children &lt;8 years of age (End-of-Test Warnings: Abrupt End / Blow Out Longer)</li> </ul> </li> <li>• Spirometry screen improved             <ul style="list-style-type: none"> <li>○ Layout and information presentation improved</li> <li>○ Curves adapt to window size (enlarged flow-volume and volume-time curves)</li> <li>○ Added full screen view of curves and result grid via double click</li> <li>○ Volume-time curve zooming added</li> </ul> </li> <li>• New LCI predicted (Sylvia Verbanck, Thorax 2012)</li> <li>• Russian translation improved</li> </ul>
<b>V1.5.0.18</b> December 2012	<ul style="list-style-type: none"> <li>• Bronchoprovocation (Challenge testing)             <ul style="list-style-type: none"> <li>○ Mannitol</li> <li>○ Methacholine</li> </ul> </li> <li>• Balloon incentive with automatic ethnicity and gender selection</li> <li>• Predicted             <ul style="list-style-type: none"> <li>○ Additional Sets: e.g. Quanjer 2012 (GLI), Falaschetti 2004, Zapletal 2003</li> <li>○ Additional FRC predicted values</li> <li>○ Patient Height: allow more precise patient entry and predicted calculation (e.g. 170.7 cm)</li> </ul> </li> <li>• Database size reduced</li> <li>• Additional language: Italian</li> <li>• Open/review/export a test in “Raw Data Format” WBreath</li> <li>• Speed improvement when adding a trial</li> <li>• User interface improvements</li> <li>• Windows 8 ready (32 and 64bit): Attention: Tablets with Windows RT and Windows 8 look almost identical, but our software only supports the ‘full’ Windows 8 version.</li> </ul>
<b>V1.4.1.2</b> June 2012	<ul style="list-style-type: none"> <li>• Added new textual spirometry interpretation (JRS) which corresponds with existing graphical interpretation</li> <li>• Fix: SVC end of test criteria with automatic test end was in some cases too early</li> <li>• Improved test comment when updating an existing test, e.g. when weight was not correctly entered. New comment contains units of changed values (e.g. kg or lb for weight)</li> </ul>
<b>V1.4.0.4</b> Jan. 2012	<ul style="list-style-type: none"> <li>• New Predicted Sets             <ul style="list-style-type: none"> <li>○ Pérez Padilla 2001: Spiro, Mexican Workers</li> <li>○ Pérez Padilla 2003: Spiro, Mexican Children</li> <li>○ Pérez Padilla 2006: Spiro, PLATINO study, adults &gt;40</li> <li>○ Klement, Russia: Spiro</li> <li>○ Klement, Russia: Lung Volumes</li> </ul> </li> <li>• Allows FRC test reviews</li> <li>• “Don’t hesitate” message appears less often. BEV criteria has been extended</li> <li>• Monkey incentive runs also on old (slow) PCs</li> <li>• Interpretation tree: localized parameter names</li> </ul>
<b>V 1.3.4.2</b> Oct. 2011	<ul style="list-style-type: none"> <li>• New Incentive supporting inhalation (Monkey)</li> <li>• Optionally show large incentive</li> <li>• New patient entry fields: ordered by, referred by, smoker pack-years</li> <li>• New pediatric predicted sets (Nystad, Vilozni)</li> <li>• Optionally show FEV1/FVC in % (all ratio parameters)</li> <li>• Print Volume-Time curve with 1:1 aspect ratio by default</li> <li>• Improved fonts and layout of user interface</li> <li>• Restore last selected patient list order</li> <li>• Merge (import) databases</li> </ul>

Version Date	Description
<b>V 1.3.1.8</b> Apr. 2011	<ul style="list-style-type: none"> <li>• Fixed GDT review bug</li> <li>• Allow user to return results to EMR even when standard EMR mode is finished</li> <li>• Allow user to activate DLCO settings (for DLCO test review)</li> </ul>
<b>V 1.3.0.4</b> Feb. 2011	<ul style="list-style-type: none"> <li>• New Spirometry predicted values: Stanojevic 2009 and Langhammer</li> </ul>
<b>V 1.3.0.0</b> Dec. 2010	<ul style="list-style-type: none"> <li>• Synchronize with EasyOne data</li> <li>• Customizable EMR connection available (PlugIn)</li> <li>• Change Patient Data and recalculate previous performed tests</li> <li>• Change Predicted Sets and recalculate previous performed tests</li> <li>• Add comments to patient, printed with report</li> <li>• Patient search by ID</li> <li>• Selectable system created Patient ID</li> <li>• Improved birth date entry</li> <li>• Optional Smoker status</li> <li>• Spirometry tests with very low flows and volumes</li> <li>• Optional non smoker Lung age feature</li> <li>• Merge patient feature</li> <li>• Multi line comments</li> <li>• New 2 page report</li> <li>• Summary report for 'Best Trial' configuration improved</li> <li>• Last calibration check date available on customized reports</li> <li>• Default settings (Predicted Sets) selected by region</li> <li>• Export of single test in XML format</li> <li>• New Spirometry predicted values: Gutierrez et al. (Canada).; Mengesha et al. (Ethiopia); ; Gutierrez et al. (Chile); Eigen et al. (USA); Rosenthal (UK)</li> <li>• New language: Russian</li> </ul> <p>DLCO test review constraint: do not change collection bar</p>
<b>V 1.2.3.10</b> May 2010	<ul style="list-style-type: none"> <li>• Delete patient</li> <li>• User ID (Technician ID)                         <ul style="list-style-type: none"> <li>○ User handling with simple Log-On functionality</li> <li>○ User ID on report (if test was performed with a valid user Log-On)</li> </ul> </li> <li>• XML export</li> <li>• SVC with expiration only is accepted (configuration flag)</li> <li>• Updated manuals (help button opens manual on context specific page)</li> <li>• Direct FVC or FVL test selection in Perform Test menu</li> <li>• Test procedure starts directly ("Add Trial" after "Perform Test" click is skipped)</li> <li>• Calculation of Best (Reported) column adapted (recalculate ratios; take best for volume parameters; report IC, IRV, VT, ERV parameter as average values / to be consistent within the Best column)</li> <li>• COPD interpretation graph on standard spirometry report</li> <li>• Summary report adaptations:                         <ul style="list-style-type: none"> <li>○ Includes FVC/FVL, SVC and DLCO (within 12 hours) independent on order of test execution and test selection</li> <li>○ Show selected predicted sources</li> <li>○ Fits on one page</li> </ul> </li> <li>• New predicted source: Austrian 1994</li> </ul>



Version Date	Description
<b>V 1.2.0.6</b> February 2010	<ul style="list-style-type: none"> <li>• Children Animation available as well for tidal and manual test end</li> <li>• The FV-curve is no more covered by the child animation graphic when reviewing an old test</li> <li>• New added patient is selected by default (shown in the bottom left corner, as well in GDT mode)</li> <li>• Removed USB stick does no more influence saving test data</li> <li>• Improved display of Vietnamese texts</li> <li>• Additional Interpretation: Gold/Hardie 2008 without “at risk for COPD”</li> <li>• GDT: additional data transferred               <ul style="list-style-type: none"> <li>○ contains post test measurement data</li> <li>○ exports single measurement data with setting best trial</li> </ul> </li> </ul>
<b>V 1.2.0.0</b> November 2009	<ul style="list-style-type: none"> <li>• Basic children incentive</li> <li>• New Languages (French and Vietnamese)</li> <li>• Support Screen with 1024x600</li> <li>• GDT with PDF integration</li> <li>• Draw predicted curve instead/additional to points</li> <li>• Optional patient fields (name, weight, Asthma, DLCO)</li> <li>• Allow rejecting last trial</li> <li>• GDT: single measurement list includes Predicted (8460) and LLN (8461)</li> <li>• Print Preview: selected report is shown in the drop down list</li> <li>• Bio Cal Checks listed as well in the patient history</li> <li>• Spiro Results Grid expands on double click</li> <li>• Shown precision specific for each parameter</li> </ul> <p>BugFix:</p> <ul style="list-style-type: none"> <li>• Cal Check report contains test date</li> </ul> <p>EOPC only</p> <ul style="list-style-type: none"> <li>• Newest USB drivers (Windows 7)</li> <li>• Ready for Windows 7 64Bit</li> </ul>
<b>V 1.1.2.3</b> End July 2009	<ul style="list-style-type: none"> <li>• Improved Report handling, Report designer, allows e.g. show best column only</li> <li>• Report template contains BMI and LLN column</li> <li>• Birth Date format on the patient entry form according to the PC culture settings</li> <li>• Allow altitude entry in feet</li> <li>• Entry of longer comments (65000 chars)</li> <li>• MEF Parameter added</li> <li>• New DB functions (new, copy)</li> <li>• User can define the name of ethnicity “Other”</li> <li>• Added Spanish, Dutch, Portugues, Turkish</li> <li>• NLHEP, NICE Interpretation added</li> </ul> <p>BugFix:</p> <ul style="list-style-type: none"> <li>• new Predaut (remote application start error)</li> <li>• GDT               <ul style="list-style-type: none"> <li>○ allow selection of character set</li> <li>○ allow longer Paths</li> <li>○ Handling empty string for patient height and weight</li> </ul> </li> <li>• Show graph in the Excel export</li> </ul>
<b>V<sub>b</sub>1.0.0.7</b> 09.06.2009	<ul style="list-style-type: none"> <li>• English manual with improved cleaning instruction</li> </ul>
<b>V<sub>a</sub> 1.0.0.7</b> 25.09.2008	<ul style="list-style-type: none"> <li>• First official release of EasyWare</li> </ul>