AP Connect Supported Instruments and Instrument Requirements

The following document lists all supported instruments and their required software versions that can be connected to AP Connect Version 3.0 and higher.

1 Anton Paar Instruments and Modular Measuring Systems

NOTICE:

- If you are using AP Connect Pharma Edition, you have to use the latest version of the software for the corresponding instrument.
- To use all features of the current AP Connect version, also the instrument has to use the latest instrument software version.
- If the tasklist feature (only Standard Edition) is used, it is necessary to use the latest software version of the instrument.

Type	Minimum software version together with APC Standard Edition**	Minimum software version using APC Pharma Edition	Restrictions***
ABA 300/500	1.3.2	1.3.5	AP Connect tasklist feature is not supported.
Abbemat Performance Plus (350, 550) Heavy Duty line (450, 650)	5.30	5.30*	Tasklist: Follow the instrument specific recommendations in the AP Connect Software Manual (D96IB001)
Alcolyzer Beer/Wine Analyzing System with DMA M: • DMA M • Alcolyzer Beer/Wine/Spirits ME and Alcolyzer ME • Xsample 320/520 optional: • pH ME • Option Color 430nm • HazeQC ME	2.95. Build 323	2.98 Build 661*	
Alcolyzer Analyzing System for Spirits and Liqueurs with DMA M: • DMA M • MCP 100/150 • Alcolyzer ME / Alcolyzer Spirits ME • pH ME • Xsample 320/520	2.95. Build 323	2.98 Build 661*	
Alcolyzer M	2.97	2.98 Build 661*	No Alcolyzer adjustments are transferred
Beer/Wine/Spirits Analyzing System with DMA 4101/4501/5001: • DMA 4101/4501/5001 • Alcolyzer 3001 Beer/Wine/Spirits and Alcolyzer 3001 • Xsample 320/520 optional: • pH 3101 • Option Color 430nm • Haze 3001	3.0.0	5.0.2	No module adjustments are transferred (Alcolyzer3001/CarboQC/ pH3201/Haze3001/Color)

* If you want to deactivate the audit trail of the device, deregister the device from AP Connect beforehand.
 After deactivation of the instruments audit trail, it can be registered again in AP Connect.
** Not all functions of AP Connect are supported, if the instrument does not use the latest software version. Especially if the tasklist feature is used, we recommend to use the latest software version of the instrument.
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Type	Minimum software version together with APC Standard Edition**	Minimum software version using APC Pharma Edition	Restrictions***
Cora 5001 (via Spectroscopy Suite version 1.1)	1.5	1.5	See Spectroscopy Suite.
Diana 300/700	1.8.2/1.8.0	1.8.3/1.8.3	AP Connect tasklist feature is not supported.
Diet Soft Drink Measuring System 3001 • With DMA 4501 Diet • Xsample 320/520 optional: • pH 3101	4.0.0	4.0.0	No module adjustments are transferred (Alcolyzer3001/CarboQC/pH3201/Haze3001/Color).
DMA 35 (mat. no. 172244, 187111) via Instrument Adapter for AP Connect	1.015	1.015	Connection via Instrument Adapter for AP Connect, see section 3 Anton Paar Instruments and Modular Measuring Systems. AP Connect tasklist feature is not supported.
DMA 35 Ex, Ex Petrol, Ampere (mat. no. 183056, 183057, 226130, 223336, 187110) via Instrument Adapter for AP Connect	1.006	1.006	Connection via Instrument Adapter for AP Connect, see section 3 Anton Paar Instruments and Modular Measuring Systems. AP Connect tasklist feature is not supported.
DMA 501/1001 (supported: mat. no. 186376 and 180173 not supported: mat. no. 229962 and 229961 models with type approval)	4.1.0	4.5.0	Tasklist: follow the instrument specific recommendations in the AP Connect Software Manual (D96IB001).
DMA 4100/4500/5000 M	2.95. Build 323	2.98 Build 661*	All adjustments are transferred except Manual Adjustment Data Input [Density] and Filling Warning Adjustment.
DMA 4200 M DMA 4500 M Chemicals	2.98	2.98 Build 661*	
DMA 4101/4501/5001	2.0.0	5.0.2	Tasklist: follow the instrument specific recommendations in the AP Connect Software Manual (D96IB001).
DMA 4501 Diet	4.0.0	5.0.2	Tasklist: follow the instrument specific recommendations in the AP Connect Software Manual (D96IB001).
DSA 5000 M	2.97	2.98 Build 661*	Only adjustments which are performed with administrator rights are transferred
Lovis 2000 M	2.98_425	2.98 Build 661*	For instrument-software-version < 2.98_529 adjustments are not transferred. AP Connect tasklist feature is not supported.
Lyza 5000 Wine optional: • Xsample 370/520 • DMA 4100/4500/5000 M • Alcolyzer Wine M/ME • HazeQC ME • pH ME	2.2.0	2.2.0	Data is not removed from instrument although the option can be selected in AP Connect. Details and settings of Xsample are not sent to AP Connect. AP Connect tasklist feature is not supported.

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Type	Minimum software version together with APC Standard Edition**	Minimum software version using APC Pharma Edition	Restrictions***
Lyza 7000	1.3.0	1.3.0	Checks and Adjustments are not transferred to AP Connect. AP Connect tasklist feature is not supported. Lyza 7000 is also supported via Spectroscopy Suite (from version 1.1), if the Spectroscopy Suite is installed on the same computer as AP Connect.
MCP series (except MCP 100/150)	5.30	6.10*	Set Zero is not transferred (other adjustments are transferred) Tasklist: follow the instrument specific recommendations in the AP Connect Software Manual (D96IB001).
Modulyzer with DMA M • DMA M • MCP 100/150 • Abbemat Series (PL and PPL) • Xsample 530 optional: • SRU for Xsample 530 • Lovis ME • HazeQC ME • pH ME	2.95 Build 323	2.98 Build 661*	
Modulyzer with DMA 4101/4501/5001 • DMA 4101/4501/5001 • MCP 100/150 • Abbemat Series (PL and PPL) • Xsample 530 optional: • SRU for Xsample 530 • Haze 3001 • pH 3101	4.0.0	5.0.2	No module adjustments are transferred
PBA-B and PBA-W with DMA M: • DMA M • Alcolyzer Beer/Wine ME and Alcolyzer ME • CarboQC ME optional: • pH ME • Option Color 430nm • HazeQC ME • Option O$_2$ (CarboQC)	2.95 Build 323	2.98 Build 661*	
PBA-S with DMA M • DMA M • CarboQC ME optional: • pH ME • Option O$_2$ (CarboQC) • DietQC ME / DietQC ME with option for uncolored drinks	2.95 Build 323	2.98 Build 661*	

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AP Connect Supported Instruments and Instrument Requirements

Type	Minimum software version together with APC Standard Edition**	Minimum software version using APC Pharma Edition	Restrictions***
PBA-SI with SDA M: • SDA M • CarboQC ME optional: • pH ME • Option O$_2$ (CarboQC) DietQC ME/ DietQC ME with option for uncolored drinksUV	2.97	2.98 Build 661*	Only adjustments which are performed with administrator rights are transferred.
PBA 5001 Beer/Wine with DMA 4101/4501/5001: • DMA 4101/4501/5001 • Alcolyzer 3001 Beer/Wine • CarboQC ME optional: • pH 3201 • Option Color 430nm • Haze 3001 • Option O$_2$ (CarboQC)	3.0.0	5.0.2	No module adjustments are transferred (Alcolyzer3001/CarboQC/ pH3201/Haze3001/Color)
PBA 5001 Soft Drink with DMA 4101/4501/5001 • DMA 4101/4501/5001 • CarboQC ME optional: • pH 3201 • Option O$_2$ (CarboQC)	3.0.0	5.0.2	No module adjustments are transferred (Alcolyzer3001/CarboQC/ pH3201/Haze3001/Color)
PBA 5001 Soft Drink Diet with DMA 4501 Diet • DMA 4501 Diet • CarboQC ME optional: • pH 3201 • Option O$_2$ (CarboQC)	4.0.0	5.0.2	No module adjustments are transferred (Alcolyzer3001/CarboQC/ pH3201/Haze3001/Color)
PMA 300/500	1.3.1/1.2.2	1.3.1/1.2.3	AP Connect tasklist feature is not supported.
PNR 12 via Instrument Adapter for AP Connect	04.02.0015	04.02.0015	Connection via Instrument Adapter for AP Connect, see section 3 Anton Paar Instruments and Modular Measuring Systems.
PSA via Kalliope and via Instrument Adapter for AP Connect	3.4.4	3.4.4	Connection via Instrument Adapter for AP Connect, see section 3 Anton Paar Instruments and Modular Measuring Systems. AP Connect tasklist feature is not supported.
Snap 51 via Instrument Adapter for AP Connect	1.003	1.003	Connection via Instrument Adapter for AP Connect, see section 3 Anton Paar Instruments and Modular Measuring Systems. AP Connect tasklist feature is not supported.
Soft Drink Analyzer M (SDA M)	2.97	2.98 Build 661*	Only adjustments which are performed with administrator rights are transferred.

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AP Connect Supported Instruments and Instrument Requirements

Type	Minimum software version together with APC Standard Edition**	Minimum software version using APC Pharma Edition	Restrictions***
Soft Drink Analyzer M (SDA M)	2.97	2.98 Build 661*	Only adjustments which are performed with administrator rights are transferred.
Soft Drink Measuring System 3001 with DMA 4101/4501/5001 • DMA 4101/4501/5001 • Xsample 320/520 optional: pH 3101	3.0.0	5.0.2	No module adjustments are transferred (Alcolyzer3001/CarboQC/ pH3201/Haze3001/Color)
Spectroscopy Suite	1.1	1.1	Spectroscopy Suite can be registered as an instrument in AP Connect. Both programs must be installed on the same instance (computer, server). AP Connect tasklist feature is not supported. No system suitability test and adjustments reports are transferred.
SVM 2001/3001/4001	SVM 2001/3001: 2.96 SVM 4001/ 3001 Cold Properties: 2.97 build 39	2.98 Build 661*	No calibrations or adjustments are transferred, except the atmospheric pressure sensor adjustment (DCB). Tasklist: follow the instrument specific recommendations in the AP Connect Software Manual (D96IB001).
TAG 300/500	1.3.4	1.3.5	AP Connect tasklist feature is not supported.
TPO 5000 via Instrument Adapter for AP Connect	2.2.0	2.2.0	Connection via Instrument Adapter for AP Connect, see section 3 Anton Paar Instruments and Modular Measuring Systems
Ultrapyc 3000/5000 series	1.002.020	1.002.020	For Ultrapyc series certain ports are needed: UDP 3948 (AP Connect Server outgoing traffic to AP instruments), TCP 50553 listening and UDP 1234 listening (AP Connect Server incoming traffic to AP instruments). AP Connect tasklist feature is not supported.
ViscoQC 300	1.60	1.80	A maximum of 100 measuring points can be transferred to AP Connect. For mode "ASTM D2983/D8210 (LTV)" and „Temperature Ramp (TR)" 500 measuring points. AP Connect tasklist feature is not supported.

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  After deactivation of the instruments audit trail, it can be registered again in AP Connect.
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2 Sample changer and additional modules

Type	Minimum software version together with APC Standard Edition*	Minimum software version together with APC Pharma Edition	Restrictions**
Alcolyzer Beer ME	DMA 2.95 Build 323	2.98	
Abbemat 300/500	DMA 2.95 Build 323	2.98	Only supported as module
CarboQC ME	DMA 2.95 Build 323	2.98	
HazeQC ME	DMA 2.95 Build 323	2.98	
pH ME	DMA 2.95 Build 323	2.98	
DietQC ME	DMA 2.95 Build 323	2.98	
Lovis ME	DMA 2.95 Build 323	2.98	AP Connect tasklist feature is not supported.
Alcolyzer 3001 Beer/Wine/Sake/Spirits	Master 3.0.0	Master 3.0.0	No module adjustments are transferred
Haze 3001	Master 3.0.0	Master 3.0.0	No module adjustments are transferred
pH 3101/3201	Master 3.0.0	Master 3.0.0	No module adjustments are transferred
Xsample 200, 320, 330, 340, 370, 520, 530, 610, 630, 631			
PMU, MPT, SRU with Xsample 530			

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3 Instruments connected via Instrument Adapter for AP Connect

With an additional license (see D96IE002 Product Description List), the Instrument Adapter can be used together with AP Connect. Each additional instrument needs an extra AP Connect license (Standard or Pharma).
Tested instruments with the instrument adapter with configurations stated in the I70IB001 – Software Manual "Instrument Adapter for AP Connect":

Adapter type	Tested instruments – Version of Instrument Adapter 2.0
PharmSpec	PharmSpec 3 (Beckman Coulter): - supports CSV-file based communication - transmission of results and meta data to AP Connect - the supported report configuration can be found in I70IB001 - Software Manual "Instrument Adapter for AP Connect"
Metrohm pH-Meter	pH Meter 780/781 (Metrohm): - supports bidirectional communication via RS232 - transmission of results and meta data to AP Connect - the required instrument settings can be found in I70IB001 - Software Manual "Instrument Adapter for AP Connect"
Sartorius	CUBIS II balance (Sartorius) (via balance's internal web services): - supports balance's internal web services communication via Ethernet - transmission of results and meta data to AP Connect - the required hardware, software and instrument settings can be found in I70IB001 - Software Manual "Instrument Adapter for AP Connect"

AP Connect Supported Instruments and Instrument Requirements

Adapter type	Tested instruments – Version of Instrument Adapter 2.0
Sartorius SBI	Entris II and Secura II balance (Sartorius) (via SBI = Sartorius Balance Interface): - communication with balance via SBI interface via serial interface / RS 232 - transmission of results and meta data to AP Connect - the required hardware and instrument settings can be found in I70IB001 - Software Manual "Instrument Adapter for AP Connect"
Generic table	- supports a simple structured table - file based communication (*.csv and *.txt) with plain text content - transmission of results and meta data to AP Connect as tested with the following systems (required report configuration can be found in I70IB001 - Software Manual "Instrument Adapter for AP Connect"): 1. Syngistix (PerkinElmer) 2. OsmoTECH Pro (Advanced Instruments) 3. Morphologi 3 and 4 (Malvern Panalytical) 4. Mastersizer 2000 (Malvern Panalytical) 5. ZwickiLine - TestXpert II (ZwickRoell) 6. Pixel Proof (Gradient) 7. REA VeriCube (REA VERIFIER) 8. PNR 12 Penetrometer (Anton Paar) 9. TPO 5000 (Anton Paar) 10. OMNIS (Metrohm) 11. SevenExcellence Multiparameter (Mettler Toledo) 12. Tiamo: Karl Fischer 774 + 855 Robotic Titrosampler (Metrohm) 13. Iron Polarograph 884 Professional VA (Metrohm) 14. NIR Infratec (Foss) 15. Smart 6 (CEM) 16. DMA 35 (mat.no. 172244, 187111, 226130, 223336, 187110, 183056, 183057) (Anton Paar) 17. Snap 51 (mat.no. 183055) (Anton Paar) 18. PSA (Anton Paar) Further reports are supported if they have the same structure as the tested reports.
Generic report	- supports complex reports structure with different sections (key value pairs, tables) - file based communication with plain text content: *.txt, *.csv (no pdf) - transmission of results and meta data to AP Connect Was tested with the following systems (required report configuration can be found in I70IB001 - Software Manual "Instrument Adapter for AP Connect"): 1. Chromeleon (Thermo Fischer): standard report generator 2. UV WinLab (Perkin Elmer): UV-Vis Lambda 35 3. TOC-Control V Software (Shimadzu) 4. TU5200 Turbidity meter (Hach) 5. REA Vericube (REA VERIFIER) 6. DTL C - Oil tan delta and resistivity tester (Baur) 7. DTA 100 - Oil breakdown voltage tester (Baur) 8. Titrator 31 / 310 (Nittoseiko) 9. Zetium RFA-spectrometer via SuperQ 6.5E (Malvern Panalytical) 10. Testo 440 (Testo) 11. pH-meter F7x (Horiba) Further reports are supported if they have the same structure as the tested reports.
Generic JSON/XML	- supports structured reports based on nodes of JSON or XML files (key value pairs, arrays) - file-based communication: *.xml, *.json or - interface-based communication via API - transmission of results and meta data to AP Connect Was tested with the following systems (required report configuration can be found in I70IB001 - Software Manual "Instrument Adapter for AP Connect"): 1. AccuSizer (Entegris) 2. Nirvis FT-NIR Spectrometer (Bühler)

If the required instrument or software is not listed, please fill in "Instrument Integration Request" (I70IR001) and send it to support-apc@anton-paar.com.