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 2.3 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.

Type	Minimum software version together with APC Standard Edition**	Minimum software version using APC Pharma Edition	Restrictions***
ABA 300/500	1.3.2	1.3.2	
Abbemat Performance Plus (350, 550) Heavy Duty line (450, 650)	5.30	5.30*	
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 425*	
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 425*	
Alcolyzer M	2.97	2.98 Build 425*	No Alcolyzer adjustments
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	3.0.0	No module adjustments (Alcolyzer3001/CarboQC/ pH3201/Haze3001/Color)
Diana 300/700	1.8.2/1.8.0	1.8.2/1.8.0	
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 (Alcolyzer3001/CarboQC/ pH3201/Haze3001/Color)

DMA 501/1001 (supported: mat. no. 186376 and 180173 not supported: mat. no. 229962 and 229961 models with type approval)	4.1.0	4.1.0	
DMA 4100/4500/5000 M	2.95. Build 323	2.98 Build 425*	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 425*	
DMA 4101/4501/5001	2.0.0	3.0.0	
DMA 4501 Diet	4.0.0	4.0.0	
DSA 5000 M	2.97	2.98 Build 425*	All adjustments which are possible with administrator rights are transferred
Lovis 2000 M	2.98_425	2.98 Build 425*	For instrument-software-version < 2.98_529 adjustments are not transferred.
Lyza 5000 Wine with: • 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
MCP series (except MCP 100/150)	5.30	5.30*	All adjustments are transferred (except Set Zero)
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 425*	
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	4.0.0	Adjustments are not 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 425*	

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 425*	
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 425*	All adjustments which are possible 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	3.0.0	No module adjustments (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	3.0.0	No module adjustments (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	4.0.0	No module adjustments (Alcolyzer3001/CarboQC/ pH3201/Haze3001/Color)
PMA 300/500	1.3.1/1.2.2	1.3.1/1.2.2	
Soft Drink Analyzer M (SDA M)	2.97	2.98 Build 425*	All adjustments which are possible 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	3.0.0	No module adjustments (Alcolyzer3001/CarboQC/ pH3201/Haze3001/Color)

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SVM 2001/3001/4001	SVM 2001/3001: 2.96 SVM 4001/ 3001 Cold Properties: 2.97 build 39	2.98 Build 425*	No calibrations or adjustments are transferred, except the atmospheric pressure sensor adjustment (DCB)
TAG 300/500	1.3.4.	1.3.4.	
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).
ViscoQC 300	1.60	1.60	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.

* 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.
*** Further restrictions might be documented in the AP Connect Release Notes

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	
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	
Alcolyzer 3001 Beer/Wine/Sake/Spirits	Master 3.0.0	Master 3.0.0	No module adjustments
Haze 3001	Master 3.0.0	Master 3.0.0	No module adjustments
pH 3101/3201	Master 3.0.0	Master 3.0.0	No module adjustments
Xsample 200, 320, 330, 340, 530, 520, 610, 630			
PMU, MPT, SRU with Xsample 530			

* Not all functions of AP Connect are supported, if the instrument does not use the latest software version
** Further restrictions might be documented in the AP Connect Release Notes

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3 Instruments from Other Vendors (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 from other vendors 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 1.11
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"
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 CSV Adapter	The Generic CSV Adapter: - 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) Further reports are supported if they have the same structure as the tested reports.
Generic Report	The Generic Report Adapter: - 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) Further reports are supported if they have the same structure as the tested reports.

Generic JSON/XML	The Generic JSON/XML Adapter: - 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.