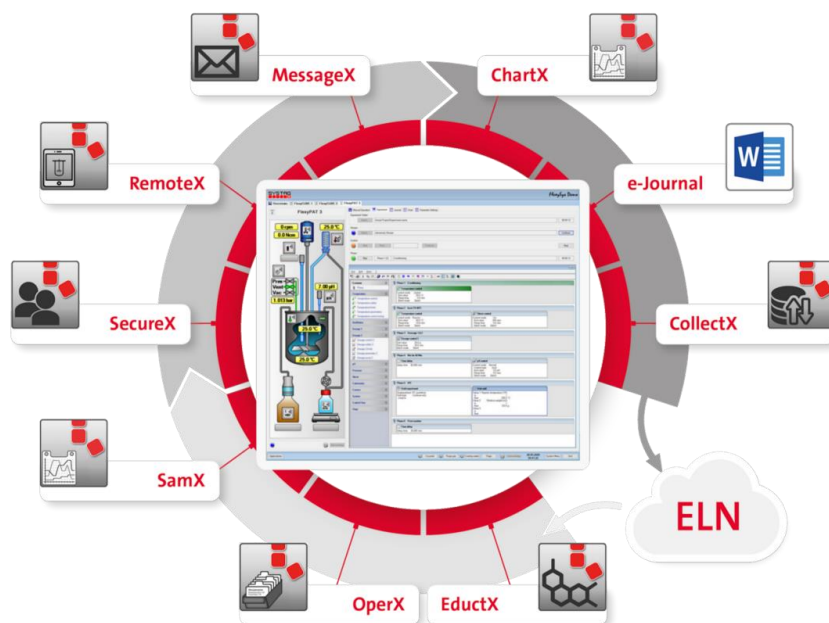




## FlexySys Hardware Compatibility List



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## Analog Signal Interface

### FlexyPAT / FlexyCUBE / ePILOT

Interface SYSTAG	Lab device interface
<b>RTD</b>	
4x PT-100	3- or 4 wire PT100 sensor
<b>Analog Input (8x UNIV)</b>	
0...10VDC	0..2, 5, 10 V
4..20 mA passive	4..20 mA output "power source"
4..20 mA active	4..20 mA output "power sink"
<b>Analog Output (8x UNIV)</b>	Load must not exceed 25 mA
0...10VDC	0...10VDC
4..20 mA	4..20 mA
<b>Digital Output (8x UNIV)</b>	Load must not exceed 2A
24VDC power source	24VDC on/off
24VDC output normally open	Pulse-width modulation input
24VDC output normally closed	Pulse-width modulation input
<b>Digital Input (8x UNIV)</b>	
24VDC	Potential free contact
Potential free contact	24VDC Output

### FlexyPlant (FlexyALR)

Interface SYSTAG	Lab device interface
<b>RTD</b>	
4x PT-100	3- or 4 wire PT100 sensor
<b>Analog Input</b>	
0...10VDC	0..5, 10 V
4..20 mA passive	4..20 mA output "power source"
4..20 mA active	4..20 mA output "power sink"
<b>Analog Output</b>	
0...10VDC	0...10VDC
4..20 mA	4..20 mA
<b>Pulse-width modulation</b>	Load must not exceed 2A
24VDC max 500mA per signal	24VDC on/off valve

## FlexySys Hardware Compatibility List

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<b>Digital Output</b>	Load must not exceed 25 mA
24VDC power source	24VDC on/off
24VDC output normally open	Potential free contact
24VDC output normally closed	Potential free contact
Potential free contact	24VDC
<b>Digital Input</b>	
24VDC	Potential free contact
Potential free contact	24VDC

## Serial Interface / Drivers

### Stirrer Interface RS232

Supplier / Model	FlexySys	Remarks
<b>SYSTAG</b>		
SysSTIR-20	3.1f	Setup changes are required or torque will remain zero
<b>IKA</b>		
Power control Visc	All	
Eurostar Control	R2.1c	
RET Visc	R3.1	Magnetic stirrer plate with integrated heater
<b>Heidolph</b>		
RZR 2051	R2.1	
RZR 2052	R2.2	
RZR 2102	R2.3	With range switching
Hei-Torque Ultimate / Precision 100, 200, 400	R2.1c	With range switching Attention! Hei-Torque Precision models are also available with USB interface. They can't be used with FlexySys. Only RS232 is supported.
Hei-Plate Mix n`Heat Ultimate	R3.2e	Magnetic stirrer plate with integrated heater. Hei-Plate Firmware-Version 5.10.655 or better.
<b>Büchi</b>		
Cyclone 300	All	Requires the cc30 control unit
Cyclone 300ac	R3.1e	Requires the BCC control unit
Cyclone 075 DC		Requires the BCC control unit
<b>CAT</b>		
R 20D-PC	R3.1f	Setup changes are required, or torque will remain zero
R 100 (C, CL, CT)	R3.2b	
<b>Variomag</b>	All	
<b>Hitec Zang</b>		
ViscoPakt -rheo	R3.1g	Requires the BCC control unit

### Stirrer Interface RS485

Supplier / Model	FlexySys	Remarks
<b>Danfoss</b>		
FC 302 frequency converter	R2.1c	Requires RS485/RS232 interface
FC280 VLT Midi Drive	3.1	Requires RS485/RS232 interface

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### Thermostat Interface RS232

Supplier / Model	FlexySys	Remarks
<b>Huber</b>		
Unistat controller (KeyPad)	R1.4	Huber Firmware 3.8 or better
Unistat Nuevo (New Keypad with touchscreen)	R1.4	
All models with cc3 controller	R2.1	Only RS-232 Interface supported
All models with PilotOne controller	R3.1	RS232 interface required
All models with MPC controller	R3.1	Suitable only for FlexyCUBE
Minichiller OL É		
All models with KISS controller		
<b>Julabo</b>		
Presto series	R2.1c	
Julabo FP xx	R2.1c	
Julabo LC4	R3.0	
Julabo LC6	R3.0	
<u>Recirculating coolers</u>		
FL-Series	R3.1	
<u>Refrigerated/Heating circulators</u>		
TopTech Series	R3.1	
HughTech Series	R3.1	
DYNEO series	R3.1	
<b>Buchi</b>		
btc	R3.0	
<b>Lauda</b>		
XT Series	R2.1c	
ECO		
Pro		
Proline		

### Thermostat Interface TCP/IP Ethernet

Supplier / Model	FlexySys	Remarks
<b>Huber</b>		
PilotOne	R3.2c	

## FlexySys Hardware Compatibility List

### Balance Interface RS232

Supplier / Model	FlexySys	Remarks
<b>Systag</b> SysBal	R3.1f	FlexyCUBE Balance 2kg. with a special adapter for power supply, RS-232 cable and a bigger platform.
<b>Mettler</b> XSR (USB)	All	XSR needs USB to RS232 Adapter
PM, SG, PB-S, PL-S, ME, MS-S, ML-T, XP-S	All	SG Series ->No taring possible
All models with MT-SICS command interface	All	Attention! With some models of Mettler balances it is not possible to turn off automatic calibration. This balance models are <b>not suitable for FlexySys</b>
<b>Sartorius</b> All models with RS232 interface	All	
Entris I + II/ CUBIS I + II with USB/RS232 adapter (Entris II BCA currently not supported)	All	Attention! Sartorius Entris models do not support screenlock -> tare during dosage technically possible.
Combics / IS EEx weighing platforms	All	
<b>HBM</b> AD101	R3.0	Load cell
<b>Precisa</b> Model LT, LS, LX	R3.1	Attention! Precisa models do not support screenlock -> tare during dosage technically possible. Sartorius emulator firmware is required
<b>Kern</b> PCB 6000-1	R3.2f	Requires RS232 adapter provided by Kern (KUP-01)

### Balance Interface TCP/IP

Supplier / Model	FlexySys	Remarks
<b>Kern</b> KDP 3000-2	R3.2f	

## FlexySys Hardware Compatibility List

### Metering pump RS232

Supplier / Model	FlexySys	Remarks
<b>Metrohm</b>		
Dosimat 665	R1.4	
Dosing Interface 846 / Dosino 800	R2.1c	USB Interface, Metrohm driver required
<b>Harvard</b>		
Syringe Pump 22	R1.4	-
Syringe Pump PHD 2000	R1.4	-
<b>Lambda</b>		
Syringe pump VIT-FIT	R3.1	
<b>Eldex</b>		
Optos Series	R3.0	
<b>Cetoni</b>		
Nemeys M Mid Pressure Syringe Pump with Qmix TC2 Temperature Control	R3.1g / 3.2c	Control software "Cetoni Elements Pro" has to be purchased by the customer at least Vers. 20220721
<b>New Era</b>		
Syringe Pump NE-1000	R3.2e	

### Vacuum pump RS232

Supplier / Model	FlexySys	Remarks
<b>Vacuubrand</b>		
CVC 2000 controller	R2.1c	
CVC 3000 controller	R2.1c	
Vacuu-Select controller	R3.2a	RS232-Adapter with FTDI chipset required (at least Firmware V1.06xx)
DCP 300 vacuum gauge	R3.1	
<b>KNF</b>		
N820G / N840G	R3.1f	-

### Flow meter / gas dosing RS232

Supplier / Model	FlexySys	Remarks
<b>Bronkhorst</b>		
EL-Flow	R2.1c	
CoriFlow series	R2.1c	
EL-Flow Prestige series	R3.1	
<b>Büchi</b>		
bpc	R2.1c	
bpc2	R2.1c	ATTENTION! The RS-232 communication of the bpc2 is strictly backward compatible with the original bpc. In order to read the pressure sensors via RS-232, the firmware version has to be updated.

### Pressure controller RS232

Supplier / Model	FlexySys	Remarks
<b>Bronkhorst</b>		
EL-Press series	R3.1c	

### Various RS232

Supplier / Model	FlexySys	Remarks
<b>Nolden</b>		
NL1271 water flow alerter	R2.1c	
<b>ProSonix</b>		
Sonolab	R2.1c	



**PAT (Process Analytic Tool)**

Supplier / Model	FlexySys	Remarks
<b>Mettler</b>		
<u>iC FBRM</u>		
Interface by "AutoChem.Core.dll"	R3.1	iC FBRM (v4.2.228, v4.2.229, v4.2.234, v4.3.377, v4.4.33)
Interface by "iC OPC UA"	-	Currently not supported
<u>iC IR</u>		
Interface by "AutoChem.Core.dll"	R3.1	iC IR (v4.2.26)
Interface by "iC OPC UA"	R3.1	iC IR (v7.1 SP1) with iC OPC UA Server v1.2.22
		Info & statement from Mettler: Please note that we are working on the next version of the iC OPC UA server and this new version will no longer be free to customers (OPC UA has become much more popular and has required an increasing amount of support so we need to recoup some of this going forward).
<b>Blazemetric</b>		
Via CollectX OPC	R3.1	