

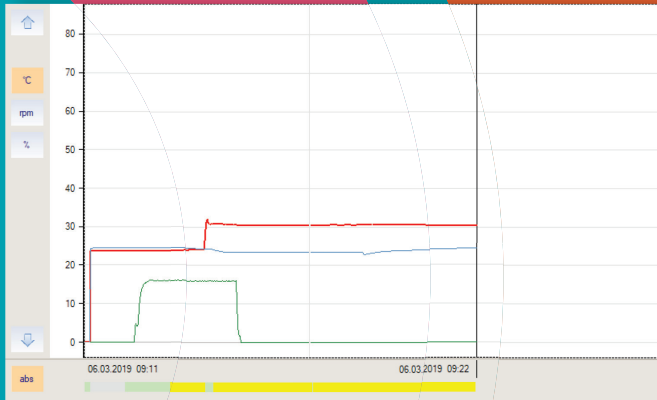
Kuhner shaker

Kuhner Insight Software

For convenient supervision of Kuhner systems
with GMP features

Data acquisition

- + Graph view of every process parameter (temperature, humidity, ...)
- + Printing of the corresponding graph



Recording of sensible process data

- + Recording of all measured values of every controller (temperature, humidity, shaking speed, ...)
- + Recording of all interactions with the shaker (user log in, setpoint changes, machine status)

no	date	time	cause	event	value
1	26.03.2019	16:03:26	AOP	new file created : preparing system	
2	26.03.2019	16:03:48	system	recording system ready ...	
3	26.03.2019	16:03:48	AOP	Program started	
4	26.03.2019	16:03:49	system	temperature: status	ctrl on, al off
5	26.03.2019	16:03:49	system	humidity: status	ctrl on, al off
6	26.03.2019	16:03:49	system	CO2: status	ctrl on, al off
7	26.03.2019	16:04:49	system	shaker 2: status	ctrl on, running, al off
8	26.03.2019	16:04:50	program	shaker 2: setpoint	20 rpm
9	26.03.2019	16:04:51	program	temperature: setpoint	26.0 °C
10	26.03.2019	16:04:51	program	humidity: setpoint	30 %
11	26.03.2019	16:04:51	program	CO2: setpoint	1.0 %
12	26.03.2019	16:05:54	program	shaker 2: setpoint	40 rpm
13	26.03.2019	16:05:59	program	temperature: setpoint	27.0 °C
14	26.03.2019	16:05:59	program	humidity: setpoint	40 %
15	26.03.2019	16:05:59	program	CO2: setpoint	2.0 %
16	26.03.2019	16:06:02	AOP	Program stopped	

Login	Name	Group	Status
AD	Admin	Admin	Active
Viewer	Viewer	Viewer	Active
SU	Supervisor	Supervisor	Active
OP	Operator	Operator	Active
AOP	auto batch ope	Automatic Batch Oper...	Active

Kuhner Insight Software

Kuhner Insight is our user-friendly software for data recording, calibration, programming and controlling. Simultaneous recording of process parameters for up to 8 shakers or orbitally shaken bioreactors is possible.

For convenient supervision of your shakers

The Kuhner Insight Software is the universal tool for any experiment. It records all relevant process data such as shaker speed, temperature, humidity, and CO₂ concentration as well as dissolved oxygen and pH for our orbitally shaken bioreactors (OSB) and our shakers with BPM-60. Additionally, all interactions with the shaking machine like user log in or setpoint changes are recorded. To easily monitor your experiment, all process parameters can be displayed in formattable diagrams and can also be printed. Setpoints for the different process parameters can either be defined in a program, which is automatically executed or can be changed manually through the control panels for e.g. shaking speed and temperature. With Kuhner Insight, you define your own user management policy according to your needs. The multi-user interface of the software provides access for up to 255 users in customizable groups with different rights.

- + Easy to use
- + Data integrity
- + Data security
- + Data traceability
- + Up to 255 users
- + Up to 8 machines
- + Connectivity

Furthermore, the calibration of shakers and OSB is performed with this tool, and allows you to generate corresponding controller certificates, particularly interesting for IQ/OQ.

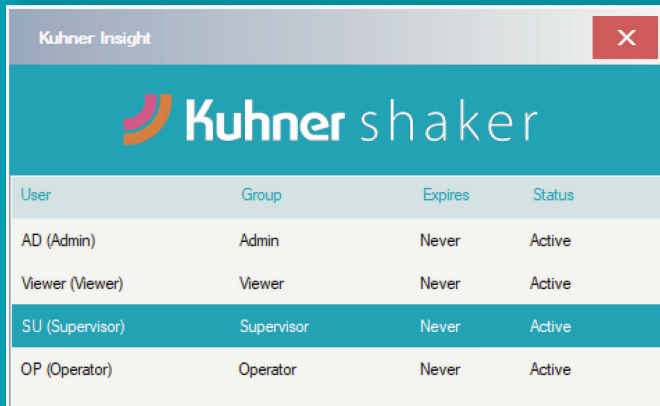
For convenient use, it is possible to connect Kuhner Insight locally with a USB/CAN interface or remotely with a CAN/Ethernet gateway.

Finally, the Kuhner Insight software can also be used on a touchscreen fully integrated into the shaker or control unit of the OSB, which is especially useful for application in a GMP environment.

Multi user interface

The multi user aspect prevents unauthorized access to the recorded data.

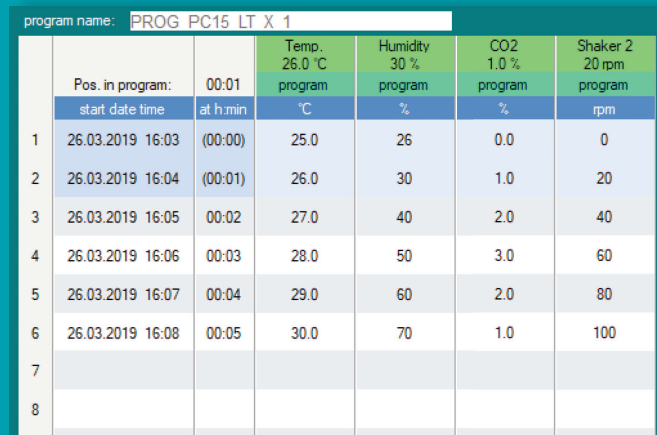
It is possible to handle different types of users that can be defined by the customer.



User	Group	Expires	Status
AD (Admin)	Admin	Never	Active
Viewer (Viewer)	Viewer	Never	Active
SU (Supervisor)	Supervisor	Never	Active
OP (Operator)	Operator	Never	Active

Batch report

The batch report contains information on the running process, for example, which steps of the program were effectively completed.



Pos. in program:	start date time	at h:min	Temp. program 26.0 °C	Humidity program 30 %	CO2 program 1.0 %	Shaker 2 program 20 rpm
1	26.03.2019 16:03	(00:00)	25.0	26	0.0	0
2	26.03.2019 16:04	(00:01)	26.0	30	1.0	20
3	26.03.2019 16:05	00:02	27.0	40	2.0	40
4	26.03.2019 16:06	00:03	28.0	50	3.0	60
5	26.03.2019 16:07	00:04	29.0	60	2.0	80
6	26.03.2019 16:08	00:05	30.0	70	1.0	100
7						
8						

Options

GMP version

The Kuhner Insight software covers all important requirements demanded when working under ISO-9000 or GMP/GLP. Technical controls for 21 CFR Part 11 compliance are integrated into the software.

With the functionality provided by the Kuhner Insight Software, automatic batch operations can be performed, providing a gain in time and efficiency.

Moreover, any alarm which occurs during the process is registered and must be acknowledged by the operator. You will thus be informed immediately about any deviation during the process.

Finally, the auto save function allows you to continuously record your batch data.

IQ-OQ Documentation

IQ-OQ (Installation Qualification and Operation Qualification) is an equipment qualification according to GMP procedure. Kuhner offers this service, which can also be carried out at the customer's premises.

Order number

SMX856000	Software Kuhner Insight for shakers with license for 1 user
SMX856001	Software Kuhner Insight for shakers with license for 2 to 5 users
SMX856005	Software Kuhner Insight GMP
SMX856006	Software Kuhner Insight Upgrade GMP Version

Shaker Control

- Manual control
- Programming setpoints
- Controller range
- Calibration

Recording

- Data acquisition
- Audit trail
- Export of data

Multi user interface

- Customizable groups
- Up to 255 users

Connectivity

- CAN-USB
- CAN-Ethernet

GMP features

- Alarm acknowledgements
- Auto save: no data loss
- Auto-log off: user automatically logs off when no action is detected
- Batch report: print of the batch operation
- Automatic batch operation



Options & Accessories

www.kuhner.com

Kuhner

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