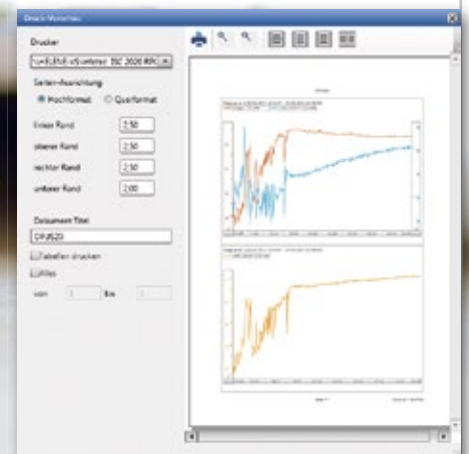
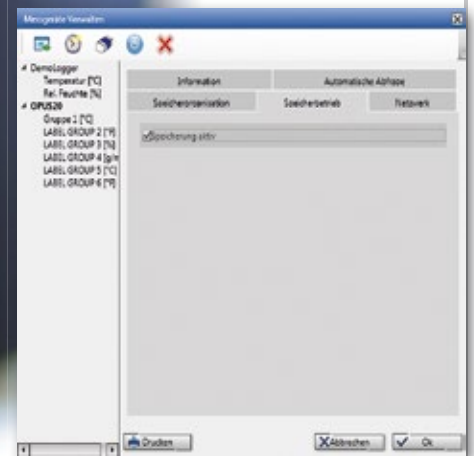


When it comes to evaluation, have the works!
With the aid of powerful software, hand-held measuring devices are turning into archives.

Smart-Graph3



Software SmartGraph3 for Lufft Hand-held Devices and OPUS20-Series



Representation and Evaluation

SmartGraph3 for OPUS20-Series

- An OPUS20 datalogger is automatically recognised and added as a “network device”.
- In addition to its data-readout function, the software possesses a recording mode that enables parallel recording to be displayed on the computer.
- The data from any desired number of OPUS20 devices can be read out simultaneously.
- The zoom function allows for quick analysis of critical time periods.
- The exporting of measured data in csv format enables it to be imported into Excel.
- The device configuration can be printed out in order to check installation parameters.
- Alarm limits – like the measured data – are chronologically managed at various times so that when changes in alarm limits occur, they can be retraced.
- Automatic data readout of all measured data is supported.

SmartGraph3 for Hand-held Measuring Devices

- A Lufft hand-held measuring device is automatically recognised and added by means of a USB interface.
- In addition to its data-readout function, the software possesses a recording mode that enables parallel recording to be displayed on the computer.
- The zoom function allows for quick analysis of critical time periods.
- The exporting of measured data in csv format enables it to be imported into Excel.
- Different measurement campaigns are archived in their respective accounts.
- All measurements recorded by the hand-held measuring device (also calculated values) are transferred to SmartGraph3.

Datum/Zeit	Temperatur [°C] mitt	Temperatur [°C] max	Temperatur [°C] min
19.04.2010 08:33:00	17,4	17,4	17,4
19.04.2010 08:34:00	17,4	17,4	17,4
19.04.2010 08:35:00	17,4	17,4	17,4
19.04.2010 08:36:00	17,4	17,4	17,3
19.04.2010 08:37:00	17,4	17,4	17,3
19.04.2010 08:38:00	17,4	17,4	17,4

Comparison of SmartGraph3 / MCPS7 for Lufft OPUS 20-Series



Comparison of SmartGraph3 / MCPS8		SmartGraph3 (included in delivery)	MCPS8 (price on request)	Lufft I-Box
Configuration	Scanning network	■	■	■
	Management of OPUS devices in various projects		■	■
	Selection of sensors out of the sensor library	■		
	User-definable sensors	■	■	■
	Defining measurement and storage rates	■	■	
	Configuration of alarm limits	■	■	■
	Installation assistant			■
	Extensible and adaptable			■*
Data storage	Storage of data during online measurements	■	■	mit Logger-App
	Linking of individual files, saving of partial measurements		■	
	Automatic resumption of data recording after network failure or power cut		■	■
	Importing of non-recorded measured values after network failure		■	
Data transfer	Direct connection via USB online/offline	■		
	LAN-TCP/IP online and memory readout	■	■	■
	Incorporation of further systems e.g. particle counter		■	■*
	Data forwarding to e.g. control units or GLT		■	■*
Alarm	Colour changes in display		■	
	Alarm window (Pop-up)		■	
	Log entry of events (audit trail)		■	
	Alarm notification via SMS or e-mail		■	■
	Alarm actions (e.g. to switch on/off relays...)		■	■*
Exporting measured values	Manual	■	■	■
	Automatic during an online measurement		■	■
	Data transfer to remote databases			with database App
	Send Measurement Data via Email			with Mail-App
	Providing Measurement Data in JSON format			■
	Providing Measurement Data in CSV format			with CSV-App*
User administration (21CFR11)	Access controlled by password		■	■
	Password history		■	
	User groups		■	
	Audit trail		■	
	Electronic record, electronic signature		■	
Visualisation	Screen layouts freely definable		■	
	Y/T- diagramme		■	
	Trend, bar, digital and numerical representation	■	■	
	Calculation of statistical values (Min,Max,Med,Variance, Standard deviation)	■	■	■*
	Client-server operation		■	
	Process monitoring		■	
	Web server		■	■
Reporting	Reports with own logos		■	
	Reports in Excel pages		■	■
	Customer-specific evaluations over any number of time periods		■	
	Display live data in web browser			with 7digit-App*
Customer specific adaption	Support of customer specific measurement devices			■**
	Data transfer in customer specific systems			■**
Hardware and Housing	Din rail and cabinet mountable			■
	Headless operation (without monitor, keyboard, mouse)			■
	Power supply (power over ethernet or power supply unit)			■
	Designed for uninterrupted service and long-term usage			■
External climate data	Reference data acquisition from DWD (german official weather service)			with DWD-App*
	Reference data acquisition from Open Weather Map			with OWM-App*

* enabled with App from the Lufft I-BOX App-Store

** enabled with customer specific App