



Electronic data logger are used to measure and log physical units, such as temperature, humidity, pressure.

The series **OPUS 20** are featured with a LAN interface, as well as USB e.g. for real time data recording.

By standard, the OPUS 20 is powered by its batteries or via USB. Optional POE versions are available, offering Power over Ethernet.



Typical Applications:

- Climate monitoring in buildings
- Control of all climate - sensitive production processes:
- In electronic data - processing centres, control cabinets, wind turbines,
- in calibration laboratories, storage rooms and museums

Functions / Model selection guide :



Funktion	OPUS 20-THI	OPUS 20-THIP
Order-Code without POE	8120.00	8120.10
Order-Code with POE	8120.01	8120.11
Power supply battery	•	•
Power supply USB	•	•
Power supply LAN (POE)	Optional	Optional
Measured data storage	3,200,000	3,200,000
Typical battery life	>1 Jahr	>1 Jahr
LC-display	•	•
One-button operation	•	•
1-point calibration by user	•	•
°C/°F switchable	•	•
Optical/acoustical alarm	•	•
Date/time	•	•
Records MIN/MAX/AVG	•	•
SmartGraph3 evaluation software	•	•
Measurement Categories	OPUS 20-THI	OPUS 20-THIP
Temperature:		
Air temperature	•	•
Humidity:		
Relative humidity	•	•
Absolute humidity	•	•
Dew point temperature	•	•
Air pressure:		
Barometric air pressure		•

Functions of the PC-Software SmartGraph3

- Graphical representation
- Numerical data (measured value display)
- Print function
- Export function for measured values (e.g. Excel)
- Gathered printouts of all measurement sites
- User administration
- Administration of up to 255 measuring devices OPUS 20

Архангельск (8182)63-90-72
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Брянск (4832)59-03-52
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Россия (495)268-04-70

Казахстан (772)734-952-31



Technical data - all OPUS 20 models with internal sensors:

Dimensions:	Length 166 mm x Width 78 mm x Depth 32 mm
Measurement rate:	10/30 s, 1/10/12/15/30 min, 1/3/6/12/24 h
Storage rate:	1/10/12/15/30 min, 1/3/6/12/24 h
Construction:	Plastic housing
Data storage:	16 MB, 3,200,000 measured values
Interfaces:	USB, LAN
LC-display:	Size 90 x 64 mm
Weight:	Approx. 250 g
Power supply:	4 x LRG AA Mignon, USB (optional: POE)
Operating temperature range:	-20...+50°C
Operating humidity range:	0...95% r.F. <20 g/m ³ (non condensing)
Included in delivery:	PC-Windows Software Smartgraph 3 for graphical and numerical representation of measured values; instruction manual; USB data cable; batteries
Optional accessories:	Art.Nr. 8120.SV1 : Ersatzbatterien für OPUS 20 Art.Nr. 8120.NT : USB-Steckernetzteil 110...230 VAC

OPUS 20-THI: Temperature and Humidity

Technical data of the internal sensors:



Temperature

Principle:	NTC
Range:	-20...+50°C
Accuracy:	±0.3°C (0...40°C, otherwise ±0.5°C)
Resolution:	0.1°C

Relative Humidity

Principle:	capacitive
Range:	10...95% r.h.
Accuracy:	±2% r.h.
Resolution:	0.5% r.h.

OPUS 20-THIP: Temperature, Air pressure and Humidity

*Perfect for
Calibration Laboratories*

Technical data of the internal sensors:



Temperature

Principle:	NTC
Range:	-20...+50°C
Accuracy:	±0.3°C (0...40°C, otherwise ±0.5°C)
Resolution:	0.1°C

Relative Humidity

Principle:	capacitive
Range:	10...95% r.h.
Accuracy:	±2% r.h.
Resolution:	0.5% r.h.

Air Pressure

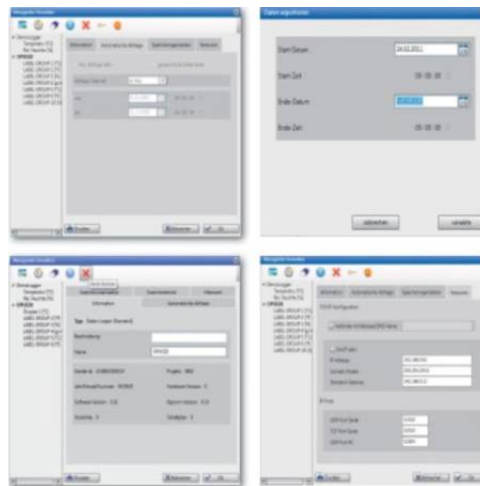
Range:	300...1300 mbar (hPa) absolute
Accuracy:	±0.5 mbar (700...1100 mbar @25°C)
Resolution:	0.1 mbar (hPa)



SmartGraph3:

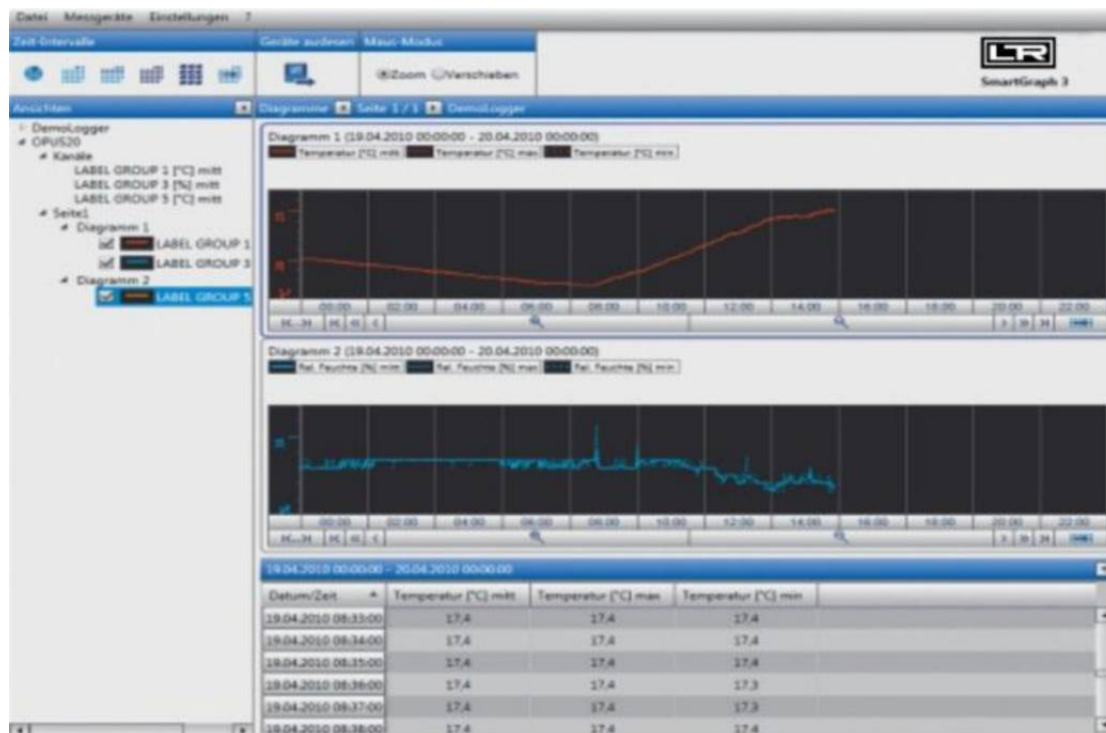
PC-Software

Included in
standard delivery



With **SmartGraph3** the gathering of measured data is simple and as intuitive as possible:

- An OPUS 20 data logger 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 OPUS 20 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.



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