

Lufft OPUS20E for External Sensors



Lufft OPUS20E for External Sensors			Order-No.
Lufft OPUS20E (neutral without Lufft-Logo 8120.30N)			8120.30
Lufft OPUS20E PoE (neutral without Lufft-Logo 8120.31N)			8120.31
Technical data	Dimensions	length 180 mm, width 78 mm, depth 32 mm	
	Measurement rate	10/30s, 1/10/12/15/30min, 1/3/6/12/24h	
	Storage rate	1/10/12/15/30min, 1/3/6/12/24h	
	Construction	plastic housing	
	Operation life (battery)	> 1 Year	
	Data storage	16 MB, 3,200,000 measured values	
	LC-Display	size 90x64 mm	
	Weight	approx. 250g	
	Included in delivery	PC-Windows Software SmartGraph 3 for graphical and numerical representation of measured values / Instructions/ data cable/ battery/ WAGO connector / DIN rail bracket	
	Interface	USB, LAN	
	bus interface	RS 485	
	Power supply	4 x LR6 AA Mignon, USB, (POE opt.)	
	Max. operation temperature	-20...50°C	
Input voltage 0-1V	Measurement range	0 ... 1V	
	Accuracy	+/- 200uV +/- 0.1% of measured value	
	Resolution	< 500uV	
Current measurement	Measurement range	2-wires: 4 ... 20mA, 3-wires: 0 ... 20mA	
	Accuracy	+/- 4uA +/- 0.1% of measured value	
	Resolution	< 5uA	
	Resistance	approx. 50 Ohm	
Thermocouple K	Measurement range	-200°C ... 1200°C	
	Accuracy	+/- 1°C +/- 0.5% of measured value at -200°C ... 0°C +/- 1°C +/- 0.2% of measured value at 0°C ... 1200°C	
	Resolution	< 0.2°C	

With up to 10 external channels/sensors per OPUS20E.

The OPUS20E offers the highest flexibility and is excellent value for money. It allows the connection of up to 4 external temperature and relative humidity sensors, as well as 2 further analogue sensors. Intelligent BUS sensors can be integrated via the OPUS20E's RS485 interface (e.g. particle counter).

Air flow and differential pressure sensors are typically connected to the OPUS20E via analogue inputs as opposed to the maximum of 4 external temperature or humidity sensors that can be integrated via a digital BUS protocol.

In connection with its LAN capabilities, the OPUS20E is able to realize universal measurement networks in real time. For standard applications the Smart-Graph 3 comes into play, and in order to fulfil the 21 CFR 11 guidelines the well-established and proven MCPS7 software is available.



Compatible sensors for OPUS20E		Page
Temperature	PT100 surface probe	19
	PT100 immersion probe	19
	PT100 immersion probe	18
	PT100 food probe, stainless steel	18
	PT100 immersion probe	19
Temperature/ Humidity	Digitale TFF20	20

Further compatible sensors on request.

Humidity:	Transducers with display
Flow:	Flow transmitters
Differential pressure:	Differential pressure transmitters
Particle:	Particle counters
CO ₂ :	CO ₂ transmitters

With up to 10 external sensors connectable per OPUS20E



Lufft OPUS20E

Configurations Examples

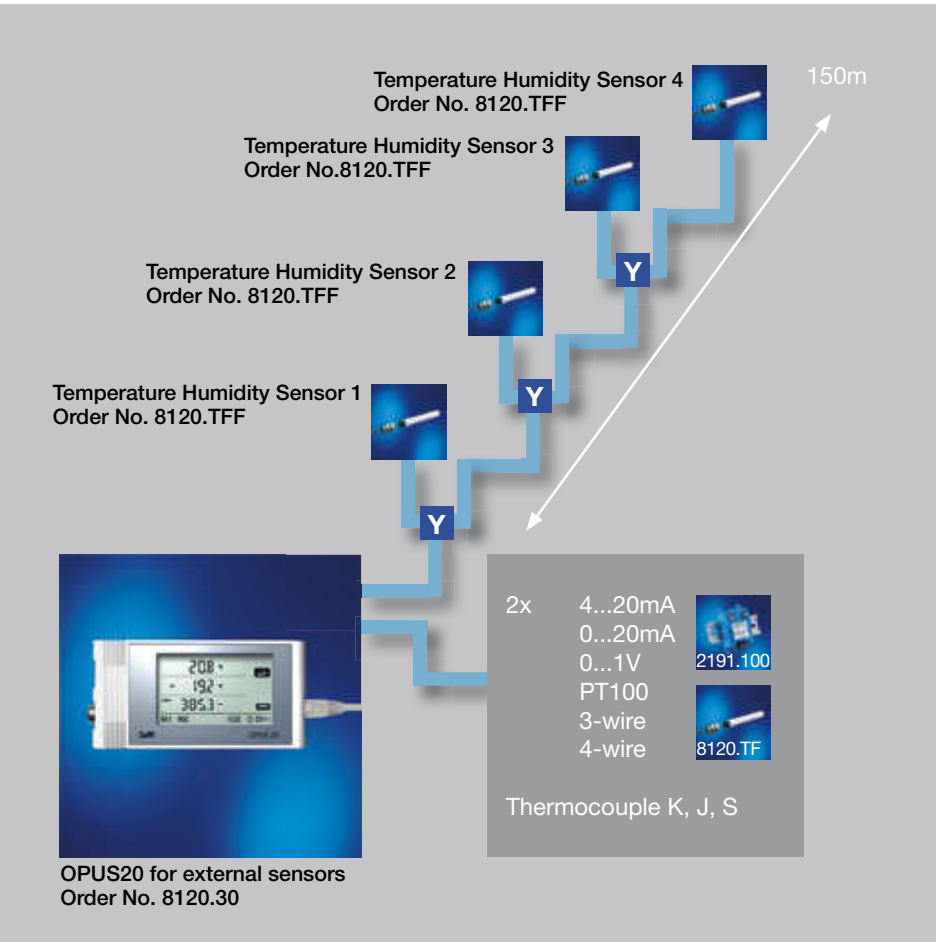
Network with up to 200 channels

The OPUS20E is equipped with an analogue input that allows the connection of 2 sensors with voltage and current output, or rather PT100 temperature sensors in 3 and 4 wire technology.

At the same time up to 4 Lufft temperature/humidity sensors can be connected to the datalogger via a serial input.

Each fully equipped OPUS20E is a 10 channel datalogger that can record various data. It also allows data to be retrieved online and offline.

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Thermocouple J	Measurement range	-200°C ... 1,200°C	
	Accuracy	+/- 1°C +/- 0.5% of measured value at -200°C ... 0°C +/- 1°C +/- 0.2% of measured value at 0°C ... 1,200°C	
	Resolution	< 0.2°C	
Thermocouple S	Measurement range	-50°C ... 1,700°C	
	Accuracy	+/- 1°C +/- 0.5% of measured value at -50°C ... 0°C +/- 1°C +/- 0.2% of measured value at 0°C ... 1,700°C	
	Resolution	< 0.2°C	
PT100	Measurement range	-200°C ... 500°C	
	Accuracy	+/- 0.2°C +/- 0.1% of measured value	
	Resolution	< 0.02°C	
Accessories	4 x LR6 AA Mignon		8120.SV1
	Power supply adapter		8120.NT
	Y Connector		8120.STY
	Cable	2m	8120.KAB2
	Cable	10m	8120.KAB10
(see page 12)	Temperature/ humidity sensor		8120.TFF
	Temperature/ humidity sensor (stainless steel sintered cap) for clean rooms		8120.TFFE



With up to 10 channels per datalogger transferring data in realtime.
Power supply via POE.