

XA1000  
XP200



# Temperature/Humidity Sensor



High-precision Temperature/Humidity Sensor			Order No.
<b>High-precision Temperature/Humidity Sensor</b>			<b>8130.TFF</b>
<b>Technical data</b>	Measurement accuracy incl. reproducibility and hysteresis	Humidity*: 15...30°C, ±0,5% RH 0...50°C, ±0,8% RH -20...80°C, ±2,5% RH	
	<b>Temperature</b>	Measuring range Operating temperature Storage temperature Principle Accuracy	-20...80°C -20...80°C -10...60°C (non-condensing) NTC 0,15°C between 0...+70°C, otherwise 0,25°C
<b>Relative humidity</b>	Principle	Resistive-electrolytic	
	Measuring range	0 ... 100 %	
<b>Housing</b>	Material	PVDF black	
	Mechanical sensor protection	Standard polyethylene dust filter	
<b>Compatibility</b>	XA1000, XP200, OPUS20E		
<b>Accessories</b>	Calibration salt 11,3% RH		<b>5700.113</b>
	Calibration salt 32,8% RH		<b>5700.328</b>
	Calibration salt 52,9% RH		<b>5700.529</b>
	Calibration salt 75,3% RH		<b>5700.753</b>
	Calibration salt 90,1% RH		<b>5700.901</b>
	Calibration adapter		<b>5700.A13</b>

\* The humidity accuracy refers to the nominal values of Novasina humidity standards, which refer to the Greenspan Report.

# CO<sub>2</sub> Sensor



The CO<sub>2</sub> probe is designed for use in harsh, demanding OEM applications. A multiple point CO<sub>2</sub> and temperature adjustment procedure leads to excellent CO<sub>2</sub> measurement accuracy over the entire temperature working range, ideal for use in agriculture or outdoors for instance. The probe incorporates the dual wavelength NDIR CO<sub>2</sub> sensor, which compensates for ageing effects, is highly insensitive to pollution and stands for outstanding long term stability. The measured data range of up to 10000ppm is available on the Modbus or on the E2 digital interface.

An optional kit facilitates easy configuration and adjustment. The measurement interval can be set according to the application requirements, by this the average current consumption can be reduced to 120µA for battery-operated devices.

CO <sub>2</sub> Sensor			Order No.
<b>CO<sub>2</sub> Sensor</b>			<b>7120.CO2</b>
<b>Technical data</b>	Dimensions	Length 96 mm, Ø 18.5 mm	
	Operating temp.	-40...60°C	
	Operating humidity range	0...100% RH (non-condensing)	
	Admissible air pressure	850...1100hPa	
	Storage temp.	-40...60°C	
	Storage humidity	0...100% RH (non-condensing)	
	Storage pressure	700...1100hPa	
	Temperature dependency	typ. 1ppm CO <sub>2</sub>   °C (-20...45°C)	
	Outputs	Digital RS485-BUS	
	Power supply	4,75...7,5V DC, max. 350mA for 0.05s	
	Electrical connection	Connector M12	
<b>CO<sub>2</sub></b>	Electromagnetic compatibility (Industrial environment)	EN61326-1 EN61326-2-3	
	Principle	Dual wavelength, non-dispersive infrared technology (NDIR)	
	Measuring range	0 ... 5000 ppm	
<b>Accuracy</b>	Accuracy	at 25°C and 1013mbar: < ±50ppm +3% of measuring value (for averaging output)	
	<b>Housing</b>	Material Protection level	Plastic PC IP65
<b>Compatibility</b>	XA1000, XP200		
<b>Accessories</b>	Y Connector for Temperature/Humidity and CO <sub>2</sub> sensor (IAQ-Indoor Air Quality Measurement)		<b>8120.STY</b>

More Information Lufft X-Series

[www.lufft-xseries.com](http://www.lufft-xseries.com)