
7. Product types

Product type	Definition	Unit	Measuring range
Absolute Humidity	absolute air humidity	g/m ³	0 to 130 g/m ³
Dew Point	Dew Point	°C °F	-55 °C to +60 °C -67 °F to 140 °F
Relativ Humidity	relative air humidity	% RH	0 to 100 %
EMC Wood	Wood equilibrium moisture content (EMC)	% Ugl.	2 to 30 % (wood moisture)
aH Kraftliner %	Absolute humidity of Kraftliner paper	%	5 to 15 %
aH testliner %	Absolute humidity of Testliner paper	%	3 to 12.2 %
Empty 1 - 5	free calibration curves for special products		

7.1 Definition product types

Absolute humidity

The absolute air humidity shows the contained amount of water in gramme per cubic metre of air. The absolute humidity is a direct degree for the amount of water vapour contained in a certain air volume. It shows how much condensate can precipitate or how much water has to be evaporated in order to obtain the desired humidity.

Dew Point

The dew point is the temperature to which the air that is not completely saturated with water vapour must be cooled so that it is completely saturated. When a room with the current relative humidity cools down to the dew point temperature, the water vapour begins to condense.

Relative humidity

Indicates the relationship between the current water vapour pressure and the maximum possible, the so-called saturation vapour pressure.

The relative humidity shows the degree the air is saturated with water vapour.
Examples:

50% relative humidity: At the current temperature and pressure, the air is half saturated with water vapour. 100% relative humidity means that the air is totally saturated with water vapour. If the air has more than 100% humidity, the excessive humidity would condense or precipitate as mist.

EMC wood

Shows the wood equilibrium moisture content (for wood stored under these conditions) in % wood moisture and the temperature in the selected unit (°C or °F).

aH Kraftliner

Shows the equilibrium moisture content of Kraftliner paper (for paper stored under these conditions) in % moisture content and the temperature in the selected unit (°C or °F).

aH testliner

Shows the equilibrium moisture content of Testliner paper (for paper stored under these conditions) in % moisture content and the temperature in the selected unit (°C or °F).

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They can be used for measuring special products (temperature compensated).

The creation of customer specific calibration curves is described in a separate operating manual. On request Schaller Messtechnik GmbH can develop customer-specific calibration curves for your product.

7.2 Application range

Within the normal application range (normal range) the accuracy of the device is as indicated. A long-term application beyond the normal application range (max. range), particularly at an air humidity of more than 80%, can lead to higher measuring errors (+3 % after 60 hours). Back in the normal application range, the sensor will return to the indicated accuracy automatically.

