



## SCS Directory

Accreditation number: SCS 0151

International standard: ISO/IEC 17025:2017  
Swiss standard: SN EN ISO/IEC 17025:2018

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Initial accreditation: 15.11.2017  
Current accreditation: 15.11.2022 to 14.11.2027  
Scope of accreditation see: [www.sas.admin.ch](http://www.sas.admin.ch)  
(Accredited bodies)

### Scope of accreditation as of 15.11.2022

#### Calibration laboratory for temperature and relative humidity

##### Calibration and Measurement Capability (CMC)

Measured Quantity / Instrument or Gauge	Measurement Range	Measurement Conditions	Best Measurement Uncertainty $\pm$ <sup>1)</sup>	Remarks
<b>Temperature</b>				Inhouse and on site (at customer's company site with high measurement uncertainty)
Calibration of dataloggers and temperature probes	-30 °C...+150 °C	Calibration bath	+/- 0,03 °C	Comparison with normal resistance thermometer
	-90 °C...-45 °C	Dry block calibrator	+/- 0,10 °C	
	>-45 °C...+125 °C >+125 °C...+155 °C	Dry block calibrator Dry block calibrator	+/- 0,08 °C +/- 0,09 °C	
Calibration of temperature measurement inputs of dataloggers and measurement systems	-180 °C	Pt100 simulator	+/- 0,20 °C	Comparison with process calibrator
	0 °C		+/- 0,15 °C	
	+100 °C		+/- 0,20 °C	
	+800 °C		+/- 0,40 °C	



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Measured Quantity / Instrument or Gauge	Measurement Range	Measurement Conditions	Best Measurement Uncertainty $\pm$ <sup>1)</sup>	Remarks
Calibration of temperature measurement inputs of dataloggers and measurement systems	-200 °C...+300 °C	Pt1000 simulator	+/- 0,30 °C	Comparison with process calibrator
	-60 °C ...+180 °C	Ni100 simulator	+/- 0,20 °C	
	-60 °C ...+180°C	Ni1000 simulator	+/- 0,20 °C	
	-180 °C...+600 °C >+600 °C...+1250 °C	Thermoelement type K simulator	+/-0,50 °C +/-0,70 °C	
Calibration of temperature measurement inputs with temperature reading displays	-180 °C +100 °C +800 °C	Temperature display Pt100	+/-0,4 °C +/-0,8 °C +/-1,0 °C	Comparison with process calibrator
	-200 °C...+850 °C	Temperature display Pt1000	+/-4,0 °C	
	-270 °C...+1372 °C	Temperature display type K	+/-4,0 °C	
Calibration of dataloggers and temperature probes in stabilised climate chambers	0 °C...+20 °C	In air	+/- 0,15 °C	Comparison with normal resistance thermometer
	>+20 °C...+25 °C		+/- 0,10 °C	
	>+25 °C...+35 °C		+/- 0,15 °C	
	>+35 °C...+50 °C		+/- 0,20 °C	
	>+50 °C...+60 °C		+/- 0,25 °C	
<b>Relative humidity</b>				Inhouse or on site (at the customer's)
Calibration of dataloggers and relative humidity probes (laboratory conditions)	10 %rH...35 %rH	23 °C +/-2 °C	+/- 0,6 %rH	Ambient temperature: 23 °C +/-2 °C Inhouse calibration, comparison with dew point monitor
	>35 %rH...65 %rH	23 °C +/-2 °C	+/- 0,8 %rH	
	>65 %rH...80 %rH	23 °C +/-2 °C	+/- 1,0 %rH	
	>80 %rH...95 %rH	23 °C +/-2 °C	+/- 1,3 %rH	
Calibration of dataloggers and relative humidity probes (on site)	10 %rH...35 %rH	0 °C...60 °C	+/- 1,2 %rH	Ambient temperature: 2 °C to 35 °C calibration on site, comparison with dew point monitor
	>35 %rH...65 %rH	0 °C...60 °C	+/- 1,6 %rH	
	>65 %rH...80 %rH	0 °C...60 °C	+/- 2,0 %rH	
	>80 %rH...95 %rH	0 °C...60 °C	+/- 2,6 %rH	
Calibration of dataloggers and relative humidity probes with SCS (ISO/IEC 17025) humidity standards	0,5 %rH	15 °C...30 °C	+/- 0,6 %rH	Molecular sieve

1) The given extended measurement uncertainty is the standard uncertainty of the measurement multiplied by an extension factor k = 2, which corresponds to a confidence level of about 95% for a normal distribution.



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Measured Quantity / Instrument or Gauge	Measurement Range	Measurement Conditions	Best Measurement Uncertainty $\pm$ <sup>1)</sup>	Remarks	
Calibration of dataloggers and relative humidity probes with SCS (ISO/IEC 17025) humidity standards	20 %rH	15 °C	+/- 1,3 %rH	Salt solutions	
		18 °C	+/- 0,9 %rH		
		20 °C	+/- 0,7 %rH		
		21 °C	+/- 0,5 %rH		
		22 °C	+/- 0,4 %rH		
		23 °C	+/- 0,4 %rH		
		24 °C	+/- 0,4 %rH		
		25 °C	+/- 0,5 %rH		
		26 °C	+/- 0,7 %rH		
	35 %rH	28 °C	+/- 0,9 %rH	Salt solutions	
		30 °C	+/- 1,1 %rH		
		15 °C	+/- 1,5%rH		
		18 °C	+/- 1,1%rH		
		20 °C	+/- 0,9%rH		
		21 °C	+/- 0,7%rH		
		22 °C	+/- 0,6%rH		
		23 °C	+/- 0,6%rH		
		24 °C	+/- 0,6%rH		
	80 %rH	25 °C	+/- 0,7%rH	Salt solutions	
		26 °C	+/- 0,9%rH		
		28 °C	+/- 1,1%rH		
		30 °C	+/- 1,3%rH		
		15 °C...30 °C			+/- 1,4%rH

In case of contradictions in the language versions of the directories, the German version shall apply.

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1) The given extended measurement uncertainty is the standard uncertainty of the measurement multiplied by an extension factor  $k = 2$ , which corresponds to a confidence level of about 95% for a normal distribution.