

**Swiss Confederation** 

Federal Department of Economic Affairs, Education and Research EAER

State Secretariat for Economic Affairs SECO

Swiss Accreditation Service SAS

### **SCS Directory**

Lab 2

Leica Geosystems AG

Accreditation number: SCS 0079

International standard: ISO/IEC 17025:2017

Swiss standard: SN EN ISO/IEC 17025:2018

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Initial accreditation: 02.06.1997

Current accreditation: 16.04.2025 to 15.04.2030

Scope of accreditation see: www.sas.admin.ch

(Accredited bodies)

### Scope of accreditation as of 16.04.2025

### Calibration laboratory for Length and Angle

Calibration and Measurement Capability (CMC)

Measured Quantity / Instrument or Gauge	Measurement Range	Measurement Conditions	Best Measurement Capability ± 1)	Remarks	Lab
ELECTRO-OPTICAL DISTANCE MEASURING INSTRUMENTS					Lab 1
Distance (to prism)	60 m	Laboratory	0,16 mm	Measurement of linearity deviations	
	120 m		0,26 mm		
Distance (non prism)	60 m	Laboratory	0,17 mm		
	120 m		0,26 mm		
Distance (to prism)	500 m	Terrain	0,07 mm	Standard deviation of a single	

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Measured Quantity / Instrument or Gauge	Measurement Range	Measurement Conditions	Best Measurement Capability ± 1)	Remarks	Lab
Distance (to prism)	1000 m		0,10 mm	measurement,	
	2000 m		0,18 mm	according to	
	3000 m		0,26 mm	ISO 17123-4	
Distance (non prism)	500 m	Terrain	0,13 mm		
	1000 m		0,15 mm		
	2000 m		0,21 mm		
	3000 m		0,28 mm		
FREQUENCY	100 MHz	Temperature range	10,0 Hz	Deviation of the modulation	Lab 1
	50 MHz	-20 °C +50 °C	5,0 Hz		
	15 MHz		1,5 Hz	frequency in function of the temperature	
THEODOLITES					Lab 1
Angles	Hz full circle	Laboratory	0,08 "	Standard deviation	
	V ± 126 °		0,08 "	of a dual face	
	(Zenith angle)			Measurement according to ISO 17123-3	
LASER TRACKER INSTRUMENTS					Lab 1 Lab 2
Two-face error		1,5 m – 6 m Laboratory	6 μm	Testing method according to ISO/FDIS 10360-10:2021	
Spatial length to retro-reflector	2300 mm	1,5 m – 6 m Laboratory	9 μm	ditto	
Spatial length to retro-reflector (in-line)	1,5 m – 53 m	Laboratory	5 μm	ditto	
Probing form error on sphere (with retro-reflector, tac- tile probe and opti- cal scanning probe)	25 - 50 mm and 90 mm	2 m – 10 m Laboratory	8 μm 11 μm	ditto	

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Measured Quantity / Instrument or Gauge	Measurement Range	Measurement Conditions	Best Measurement Capability ± 1)	Remarks	Lab
Probing size error on sphere (with retro-reflector, tac- tile probe and opti- cal scanning probe)	25 - 50 mm and 90 mm	2 m – 10 m Laboratory	6 μm 6 μm	ditto	
Orientation error with tactile probe		2 m – 10 m Laboratory	10 µm	ditto	
Probing form error on flat (with optical scanning probe)	400 mm flat	2 m Laboratory	12 µm	ditto	
Spatial length with tactile probe	2300 mm	Laboratory	12 μm	According to instructions "Customer Information Leica Laser Tracker Calibration Method" (v2.0.0en 2021)	
Spatial length with optical probe (scanning)	2300 mm	Laboratory	12 µm	dito	
Scale of Interferometer (IFM, Wavelength)	633 nm	Laboratory	0.00002 nm (0.03 ppm)	Deviation of the wavelength from the reference	
Laser Tracker Instruments and Absolute Distance Meters					Lab 1 Lab 2
Scale of Absolute Distance Meter (Frequency)	25 MHz	Laboratory	0.75 Hz (0.03 ppm)	Deviation of the modulation frequency from the reference	
Distance Offset of Absolute Distance Meter	6 m	Laboratory	7 μm		
Meteo Station - Temperature - Pressure - Humidity	One discrete measurement at current conditions	Actual laboratory condition	0.06 °C 0.7 hPa 2.5 % r.H.		

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

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16.04.2025 / S 0079scsvz en 3/3