Leica Nivel210/Nivel220
Precision inclination sensor for structural monitoring

The Leica Nivel210/Nivel220 precision inclination sensor for simultaneous measurement of inclination, direction of inclination and temperature based on an optoelectronic concept.

Precise information about inclination movements of structures in construction and engineering applications

- Two-axis high precision sensor with a resolution of 0.001 mrad
- Highly accurate measurements and long-range stability
- Real-time data on a continuous basis
- Connectable to the Leica GeoMoS monitoring software

- when it has to be **right**

Leica
Geosystems

Leica Nivel210/Nivel220
Precision inclination sensor for structural monitoring
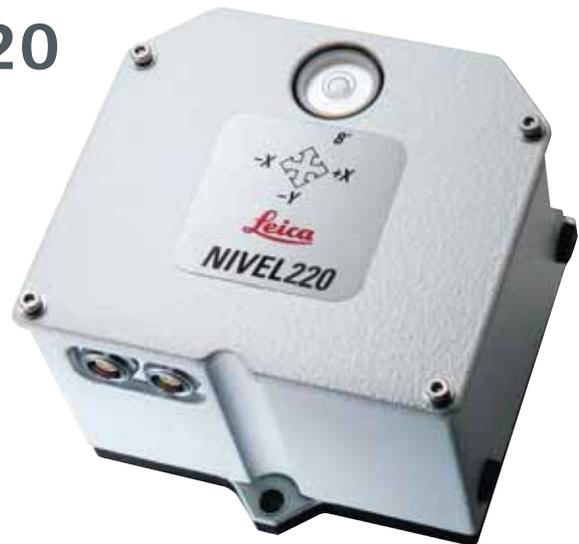
- For large structure monitoring and engineering constructions such as dams, bridges and high-rise buildings
- **The Nivel210** sensor is equipped with an RS232 interface to connect the sensor directly
- **The Nivel220** sensor is equipped with an RS485 interface to use with a bus system
- Where high precision information about the inclination and the direction of movements is needed

Integrate Nivel210 sensors into your single sensor applications
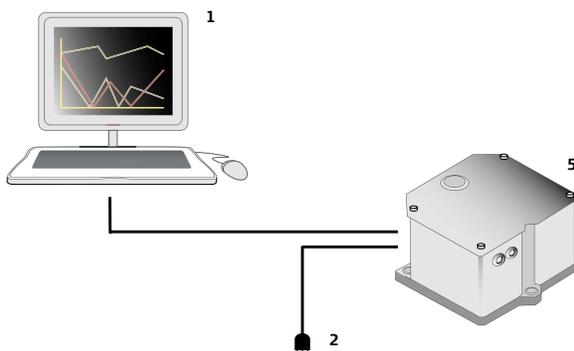
Integrate Nivel220 sensors into your monitoring network
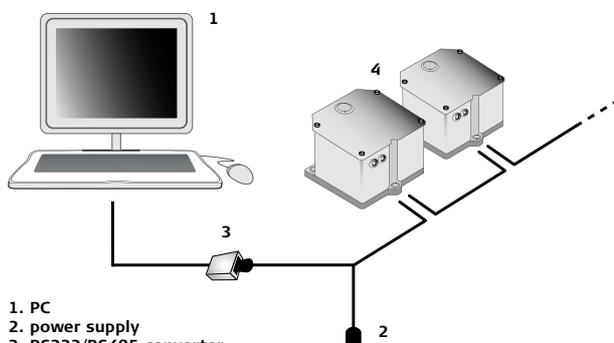
1. PC
2. power supply
3. RS232/RS485 converter
4. Nivel220
5. Nivel210

Technical data Nivel210/Nivel220

Measuring range	Range	From		To	
		[mrad]	[cc]	[mrad]	[cc]
	A	-1.51	-960	+1.51	+960
	B	-2.51	-1600	+2.51	+1600
	C	-3.00	-1900	+3.00	+1900
Resolution	[mrad]		[cc]		
	0.001		0.6		
Zero-point stability	[mrad / °C]		[cc / °C]		
	0.00471		‹3		
Accuracy	Range	[mrad]	[cc]		
	A	+/-0.0047	+/-3		
	B	+/-0.0141	+/-9		
	C	+/-0.0471	+/-30		
Power supply voltage	Nominal voltage 12 VDC				
	voltage range 9 -15 VDC				
Power consumption	0.6 W, 50 mA				
Dimensions (LxWxH)	approx. 95 x 91 x 68 mm				
Weight	0.74 kg				
Environmental Specifications					
Working temperature	-20 to +50 °C				
Storing temperature	-40 to +70 °C				
Dust/water (IEC 60529)	IP50				
Humidity	95%, non-condensing				
Averaging function	mean value can be calculated by sensor for up to 128 measurements				
Sensor addressability	max. 32 different addresses can be stored in sensor				
Measuring cycle	300 ms				
Temperature sensor					
Measuring range	-20 to +50 °C				
Interfaces	Nivel210: RS232 serial port				
	Nivel220: RS485 serial port				
Baud rates	1200, 2400, 9600, 19200, 38400				

TQM ISO 9001 / ISO 14001

Total Quality Management –
Our commitment to total customer satisfaction
Ask our local Leica Geosystems dealer for more information about our TQM program.

- when it has to be **right**

Leica
Geosystems