

# Vertical Incliner system OG310



## Areas of application

The inclinometer system is composed by a probe a control cable and a Datalogger. It is used wherever it is necessary to detect a lateral displacement caused by a landslide or an horizontal movements

In particular it is used to monitor:

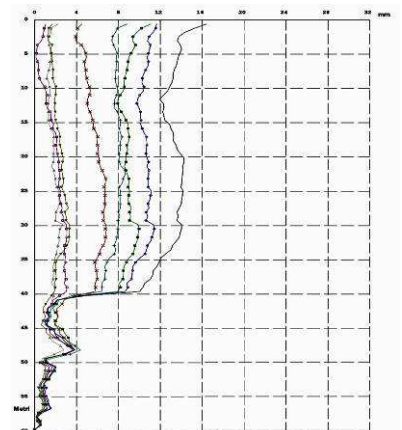
- Landslides
- Unstable Slopes
- Dams
- Bulkheads
- Excavation
- Embankments

## Technical features

The inclinometer system is equipped, depending on the model, with an inertial biaxial servoinclinometer or with a biaxial accelerometer (MEMS). Both models provide stability and precision even after several years. The probe is equipped with arms breakable for easy recovery if the system is blocked in the pipe. The inclinometer operating cable is easy to handle. The datalogger allows measurements quickly and confidently. The software for data processing is easy to use for every need and request.

## Software

- No hardware and no software keys
- Data input from keyboard, ASCII file, MS Excel, USB port via OG387 datalogger
- Available corrections for sensitivity, spiral, azimuth, angular data and zero.
- Measurement reference data: measure name, place, date, date of origin acquisition, measure ID, azimuthal correction, angular correction, sensitivity, probe ID, slides number, probe steps.




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## Technical specifications

Inclinometer Probe		
Code	<b>OG310S</b> OINCLI00000	<b>OG310F</b> OINCLI00001
Principle of functioning	inertial s servo-accelerometer	MEMS sensor
Range	+/-14.5° o +/- 30°	
Power supply	+/-12 Vdc	
Output	+/-5.0 Vdc su +/-14.5° o +/- 30°	
Resolution	25.000 sinα o 20.000 sinα	
No linearity	<0.02%	-+/- 0.057°
Full scale termal drift	<100 ppm/K	<0.013%/°C
Zero thermal drift	<0.0005 V/K	<+/-0.002°/°C
Inter axis dialignment	<1.0°	<1.5°
Probe	Stainless steel diameter 30 mm Compatible with inner tubes φ 45 to 75 mm	
Wheel base	50 cm o 24"	
Carrying whells	Detachable wheel carriages (650 N pull)	
Weigth	2.15 Kg	1.85 Kg
The probe is equipped with MIL C26482 connector		

Inclinometer cable with storage reel	
Code OINCLI200XX0	
	<ul style="list-style-type: none"> <li>• Polyuerthane sheath</li> <li>• Color: orange</li> <li>• Stainless steel anti-torsion sheath Anima in Acciaio di diametro 2.5 mm</li> <li>• Tinned copper 6x0.50 mm<sup>2</sup> conductors</li> <li>• Tinned copper crimped graduations every 50 cm, with metres reading every 10 graduations</li> <li>• Strength ~ 600 Kg</li> <li>• Storage reel diameter: 40 cm</li> </ul>

Datalogger
Code OINCLI40000

<ul style="list-style-type: none"> <li>• Microprocessor: 24FJ</li> <li>• 64 Kbyte memory dedicated to operative system, 256Kb memory for recording up to 30 measurements for 4 slides, each up to 500 steps (50cm steps in a 250 m)</li> <li>• RTC internal</li> <li>• Backlight LCD display 4x20</li> <li>• USB data output</li> <li>• Keyboard: 5 multifunctional keys</li> <li>• External button for data acquisition</li> <li>• External battery charger</li> <li>• Autonomy &gt; 12 h</li> <li>• ABS container, size: 28x26x12 cm</li> <li>• Battery: 6V 4 or 6 A/h</li> <li>• Weight: 3.4 Kg</li> <li>• OTR driver for WIN 2000/XP/Vista/7</li> </ul>

Accessories	
Code OINCLI10000	Code OINCLI8XX0
<p>Steel and aluminium pulley and cable stop</p> 	<p>Dummy probe with cable and cable reel</p> 