



Incremental Extensometer OG311Dx

Technical features



Incremental Extensometer allows to measure a vertical component of the movement. In order to complete a 3D positioning in the space of the inspected casing the same casing must be measured by a traditional inclinometer also. The instrument is used in an ABS inclinometer with pre-installed appropriated magnet rings.

The probe is 1470 mm long with a body diameter of 40 mm, it is watertight up to 1.5 MPa. The wheels are suitable for inclinometer tubes with nominal inside diameter of 60 mm. Output is digital by RS485.

The probe is equipped with breakable arms to recover the probe if blocked in the casing.

The Rugged Mobile with Android dedicated App allows measurements quickly and confidently. The software for processing of the measures is complete for every need and request.

The product is tested, calibrated and guaranteed only with original OTR accessories.

Applications

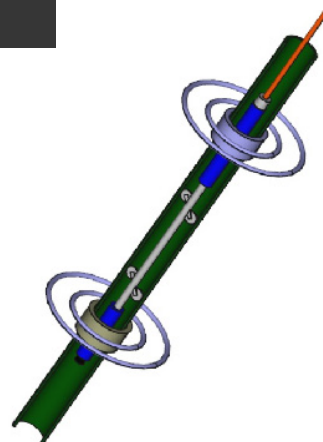
Incremental Extensometer is an instrument designed for monitoring:

- Landslides;
- Unstable Slopes;
- Deformation of rock masses;
- Tunnels excavations;
- Bulkheads and levees;
- Dams.



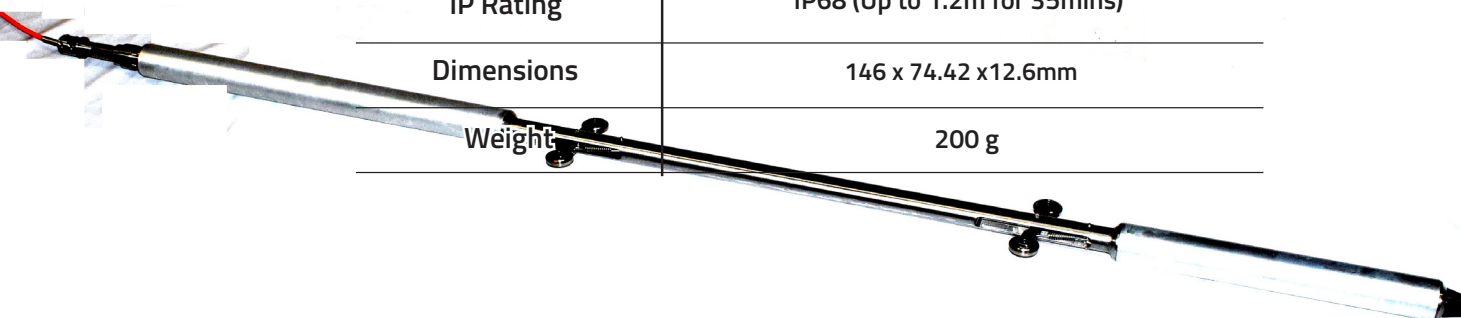
Related Instrumentation

- Datalogger
- Inclinator cable with reel
- OtrMonitoring web site



Technical Specifications

Rugged Mobile	
Battery	Lithium Ion Battery 4000 mA
Autonomy	up to 30 hours autonomy
Stand By Autonomy	up to 38 days
Display	4.7" wet finger/glove on working technology*, Super Bright Display
Memory	16Gb increasable till 128Gb
IP Rating	IP68 (Up to 1.2m for 35mins)
Dimensions	146 x 74.42 x 12.6mm
Weight	200 g



Technical Specifications



OG311Dx	
Description	Incremental Probe OG311 Dx
Working Principle	Contactless Position Sensor
Range	+/-50 mm (automatic*)
Resolution	0.01 mm
Single Supply	24 Vdc
Temperature Sensor	Built In
Probe Length	1500 mm
Sensor Temperature Coefficient	0.005% FS/°C
Working Temperature	-20°C / +60°C
Probe Material	Anodized Aluminium , Stainless Steel
Protection	IP68
Output	RS485 with OTR protocol
Suitable Casings	ABS internal Ø60 mm, external Ø70 mm
Measuring step	1000 mm
Wheels	Detachable wheels arm (650 N release point)
Weight	2.5 Kg
Inclinometer Control Cable	
Material	Polyurethane jacket
Color	Orange
Diameter	Ø 5.5 mm
Internal rope	Kevlar
Cores	4 x 0.35 mm ² tinned copper
References	Crimped tinned copper
Maximum Load	~ 180 Kg
Roll	Ø 33 cm weight 50 m ~ 6 Kg
Autonomy	>> 5 hours
Battery	7.2V NiMH 10000 mA
Current Consumption	55 mA

Codes & Part Numbers

P/N2020200 Digital Incremental Extensometer OG311 Dx
 P/N2020201 Roll & Cable 50 m with battery and electronic parts
 P/N2020202 Roll & Cable 100 m with battery and electronic parts
 P/N2020203 Rod's coupler for probe
 P/N2020204 2 meters aluminium push rods with quick couplings
 P/N2020205 Case for OG311 Dx
 P/N2020206 Spare Battery for OG311 Dx
 P/N2020207 Battery for OG311 Dx 7.2v NiMH 3000 mA
 P/N2020208 Zero setting template with 2 bonded rings
 P/N2018104 Aluminium pulley
 P/N2018105 Aluminium Dummy Probe Ø 30 mm step 500 mm
 P/N2018106 Dummy Roll & Cable 50 m
 P/N2018107 Dummy Roll & Cable 100 m
 P/N2018108 Rugged Mobile S31 with software
 P/N2018112 Extension 300 mm