

DIVIATION PROBE

Model - SG1



The new Diviation probe SG1, is designed by SysTel Geotech India Pvt. Ltd, allows to perform a set of measurements of **direction and inclination of the boreholes in 3-D space**. The SG1 embodies a magnetometric and an accelerometric sensors three some. In case of iron casing pipes which could annoy megnetometric sensors, is also provided a peroperly system composed by a set of driven poles. SG1 at the surface is linked with an **USB control box** which provides both power supply and real data transfer to the PC, Elaboration software DEVISOFT allows an instantaneous delivery of results acquired along borehole, showing its altimetric and planimetric trend.



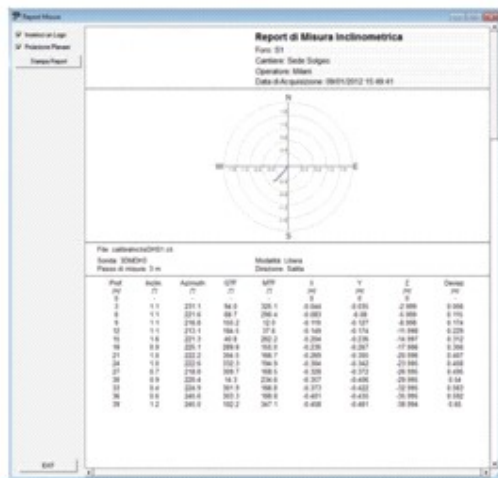
PROBE CHARACTERISTIC

Dimentions	:	100 cm. X 40 mm. diameter
Weight	:	04 Kg.
Operation Temp.	:	-40 ⁰ C to 125 ⁰ C (-10 ⁰ C to 125 ⁰ C)
Connectors	:	Sourlau 200 bar IP 69
Shock Limit	:	500g.
Enclosure	:	Brass
Software	:	Windows 10, Ultimate
Digital Output	:	USB 2.0
Voltage Supply	:	Directly from USB

INTERNAL SENSORS

Orientation Range	:	360 ⁰ C about all axis (orientation angles); inclination, azimuth, GTF, MTF, Dip Angle
Accelerometer Range	:	24-bits accelerometer; 16 bit magnetometer
Angle Resolution	:	0.02 ⁰ C
Accuracy	:	± 0.2 ⁰ inclination ± 0.5 ⁰ azimuth
Angle Measurement	:	0.1 ⁰
Repeatability	:	
Digital output rate/	:	up to 8 Hz.

Logging Rate		
Internal Communication	:	Accelerometer and magnetic field vector plus
Output Modes	:	Temperature; orientation angles plus temperature
Digital Output	:	RS-422 serial (4-wire full duplex) standard
Serial Data Rate	:	115200 baud rate
Data Logging capacity	:	up to 32,768 data records
Supply Voltage	:	+6.0 VDC min., +10 VDC max.
Supply current	:	50 mA typical when connected to host
		16 mA typical when logging at 8 Hz.
		500 μ A typical when logging at 1/4 Hz.
		50 μ A typical in deep sleep mode



INCLINOMETER CASING	MODEL SI-IC-000
Inclinometer casing is permanently installed in a borehole that passes through suspected zones of movement. Inclinometer casing can also be embedded in fill, buried in a trench, cast into concrete, or attached to a structure. Important features of casing include the diameter of the casing, the coupling mechanism, groove dimensions, straightness, and the strength of the casing.	
SPECIFICATIONS:	
Material	ABS
Collapse rating	1960kPa
Bend rating	3.07kN
Maximum Temperature	80°C
Tensile strength	705Kgf
Outside Diameter	70mm
Inside Diameter :	58mm
Casing Length	3m