semm logging
WELL LOGGING SERVICES

TECHNICAL SHEET

TRAJECTOMETRY	GYRO MEMS	GYR

Generalities

Principle
The tool is built around several digital micro-gyros, which consists of a silicon sensor chip and an integrated circuit assembled in a ceramic (non-magnetic) package. It provides directional data (azimuth and dip) at any interval from inside all types of drill rods. It can also be used in open hole applications providing azimuth data in magnetically disturbed zones.

Result
Trajectometry of the borehole, calculation of the deviation and offset at any depth.

Interest
Accurate positioning of the borehole, compliance of the borehole to the drilling specifications.

Option
Magnetometer for the magnetic azimuth measurement and borehole temperature.

Constraints / borehole

filling up	:	☒ water	☒ mud	☒ dry
casing	:	☒ PVC	☒ steel	☒ open
borehole	:	☒ cored	☒ destructive	
max. depth	:	3500 m		
effective diam.	:	45 mm - 400 mm		
temperature	:	-30 °C to 85 °C		
max. pressure	:	350 bars		

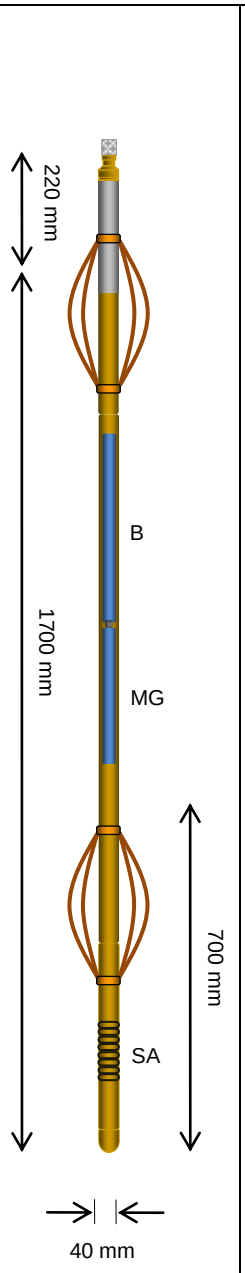
Technical specifications

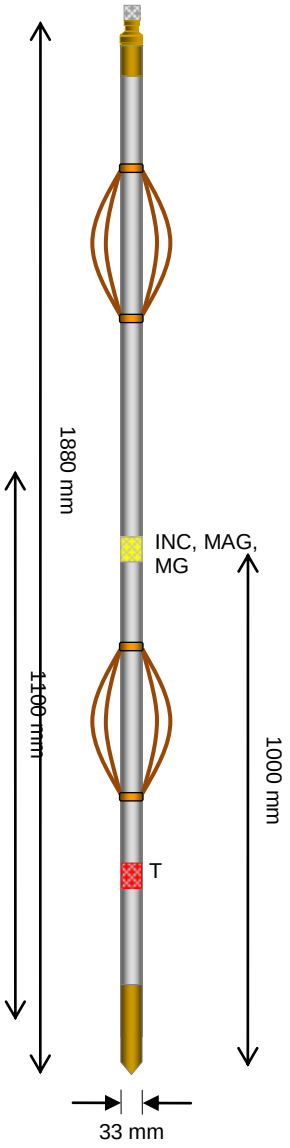
Dimensions

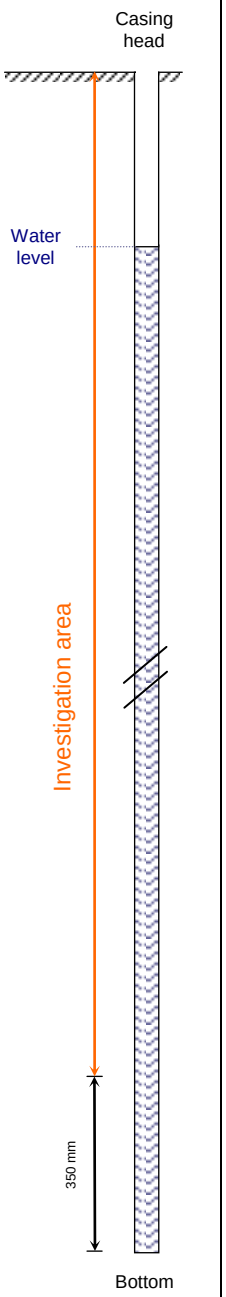
- length : 1880 ; 1920mm
- diameter : 33 mm ; 40 mm
- weight : ± 9 kg

Elements

- 3 micro-gyros : MG
- 1 magnetometer : MAG (optional)
- 1 battery : B
- 1 shock absorber : SA
- 1 temp. sensor : T (optional)







Records / Measures

Records

- Tool : ☒ centered ☐ off-centered
- Measure : ☒ down ☒ up
- Rec. speed : 1 shot/10m
  depends on the spatial sampling

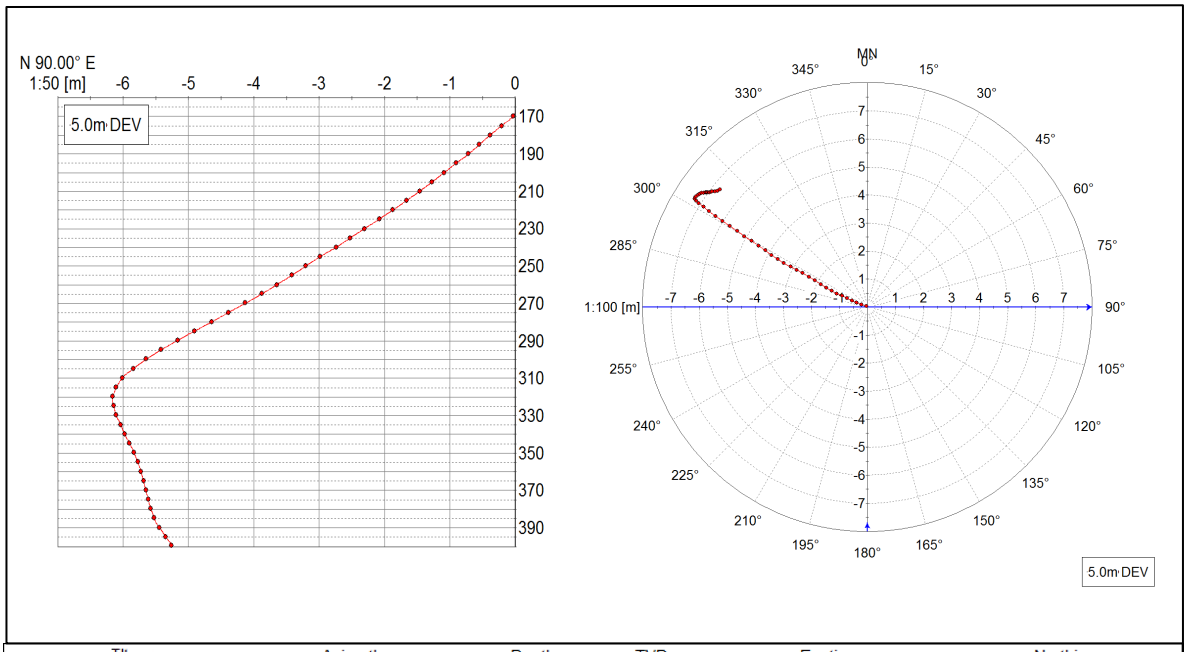
Measures

- Azimuth accuracy : ± 1.0°

Depends on the azimuth accuracy of the reference point.

- Tilt accuracy : ± 0.2°

Example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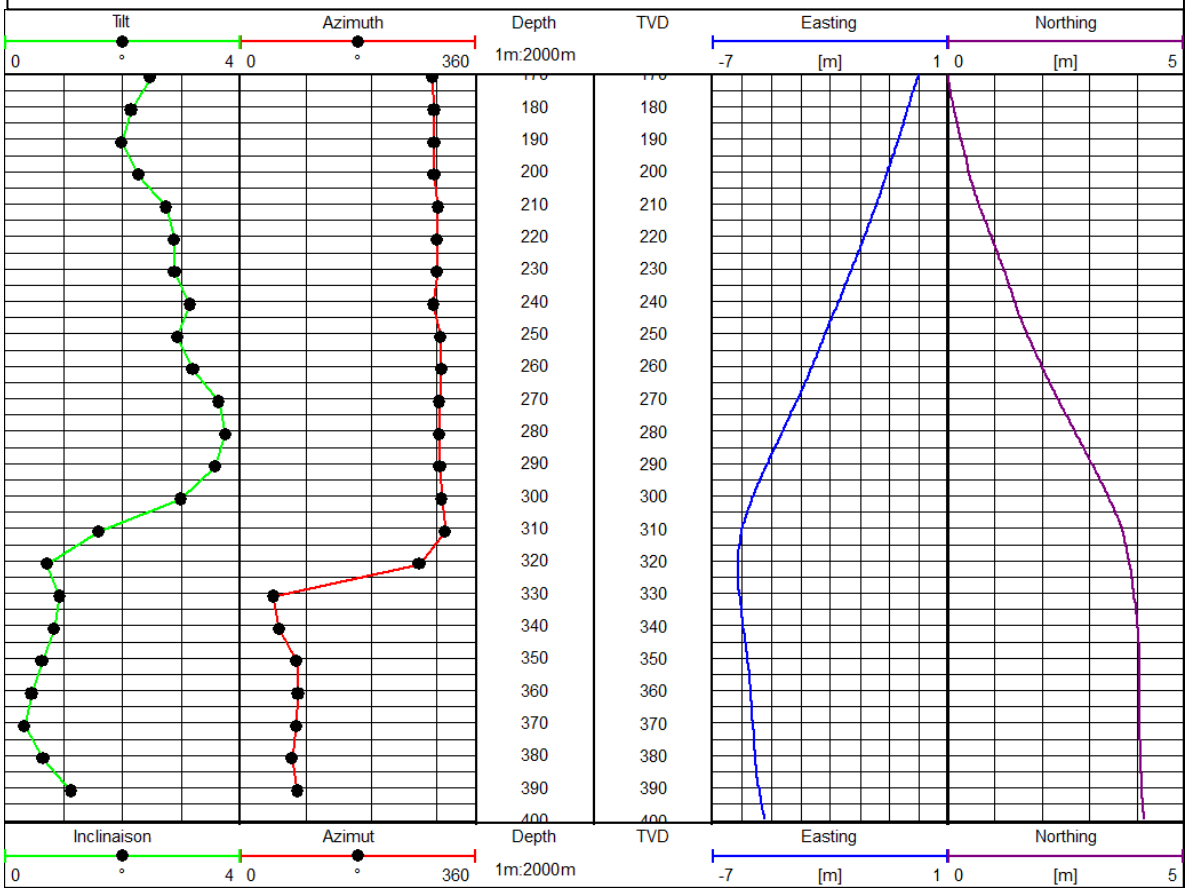
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