



HR Self North Finding Gyro Tool (HFAT)

OVERVIEW

The High-Resolution Self North Finding Gyro Tool has been designed to make the well sketch, measure the downhole logging tool's azimuth, and measure the drilling tool's face angle. This is a Strapdown Inertial Measurement System (SIMS) consisting of an optic fiber gyro and a quartz flexible accelerometer. The measurement data is output continuously during logging when the tool has stabilized after auto north-seeking.

When used in a combo with the multi-finger caliper, the magnetic thickness tool, and the segmented bond tool, the casing damage/deformation/corrosion, and the well cement bond quality are evaluated synchronously in one run.

APPLICATIONS

-  Measurement of Well sketch, downhole tools' azimuth, drilling tool's face angle
-  Combinable with other tools like PLT, MFIT, MCT, and RCBT



SPECIFICATIONS

Parameters	Description	
Max Working Temperature	175°C	
Max Working Pressure	100MPa/140MPa	
OD	43mm/54mm/70mm/86mm	
Measuring Range	Deviation	0~90°
	Azimuth	0~360°
	Relative Azimuth	0~360°
Measuring Accuracy	Deviation	±0.15°
	Azimuth	±1.5°, 3°≤Deviation≤60°±2.5°, 1°≤Deviation<3° and 60°<Deviation≤90°
	Relative Azimuth	±2°, 5°≤Deviation<10° ±1°, 10°≤Deviation≤90°
Operating Voltage	DC 180V~300V	
Operating Current	Around 150mA	
Auto North Seeking Time	≤ 4 min	