Introduction

The Near Drill Bit Measurement System is an intelligent measurement system for oil drilling system to obtain the real parameters of the bottom hole. The near-bit measurement-sending sub can detect the natural gamma in different azimuth around the bore hole and provide real-time parameters such as well inclination, temperature, and ROP with clearance of 0.5 meters away from the drill bit. Combined with the geo-steering software, it provides GR imaging to identify the change of formation lithology and control the BHA to penetrate in the best position of the oil and gas reservoirs. It is suitable for geo-steering and geological evaluation of horizontal wells, and can realize precision targeting, accurately identifying the direction of changes in the geological structure of the reservoir encountered by the drill bit, increasing the encountering rate, reducing the circulating and waiting time, and improving the drilling efficiency

Features and Benefits

- **Hi-temp. directional probe:** A group of high-precision sensor system ensures full-time high-precision acquisition of data, and the vibration-damping design ensures the stability of the whole system
- **Hi-temp. azimuthal GR probe**: The GR detection can be divided into 16 sections, especially suitable for complex reservoir and thin layer
- **Near-bit attitude measurement:** High data accuracy and stability; dynamic geo-steering with short clearance
- **Double wireless design:** Hi-speed data transmitting with Min interference, and can be connected with any MWD brand

Specification

Model	4 3/4	6 3/4	
OD (mm)	Sending Sub 130 Receiving Sub 130	Send Sub 172 Receiving Sub 172	
Connecting Length (mm)	Sending Sub 575 Receiving Sub 1003	Sending Sub 1146 Receiving Sub 1078	
Temp. (℃)	150/175		
Pressure (MPa)	125/140		
Continuous Working Hours	>200		
Wireless Data Rate (bit/s)	128		
Wireless Communication Distance(m)	14		
Pulse Generator RPM	30~450		
Item	Measure Range	Measure Accuracy	Distance to Bit
Inclination	0-180°	±0.2°	≤0.5m
Tool Face	0-180°	±1.0°	≤0.5m
Azimuthal GR	0-512API	±5%	≤0.5m

