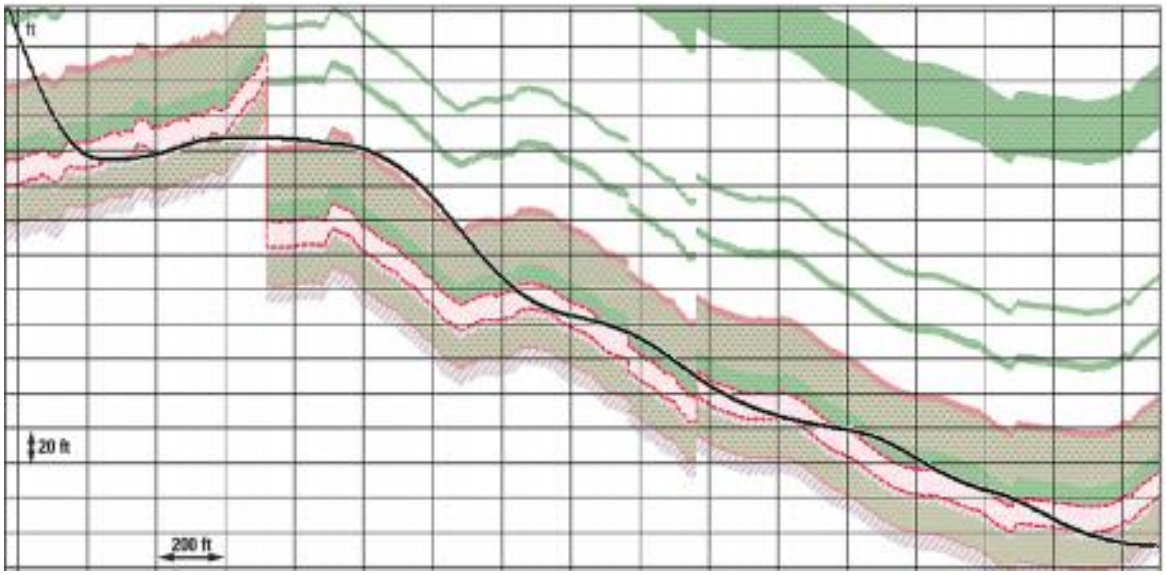
# Near-Bit

Tel: 1 778 8310158 | Fax: 1 778 8310168 | Email: etech@etech-eie.com www.etech-eie.com

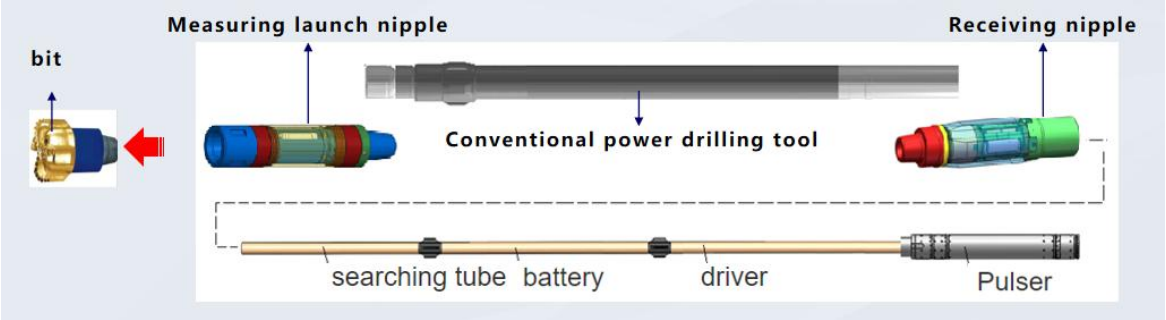
**Near-Bit** geosteering system is mainly used to solve the problems that the geological parameters and trajectory parameters of conventional geosteering instruments are far away from the bit and the measurement parameters are lagging behind, which leads to the easy exit of the drilled trajectory from the reservoir and the low drilling rate of the effective reservoir.

## Near-Bit can be applied to:

- ✓ Strata with obvious contrast between upper and lower gamma values;
- ✓ Horizontal well, directional well and extended reach well;
- ✓ Unconventional oil and gas reservoir;
- ✓ Shale;
- ✓ Coal bed methane (CBM);
- ✓ Tight sandstone;
- ✓ Conventional oil and gas reservoirs;
- ✓ Layered shale and sandstone alternate strata;




## System Composition:



**Main features**

1. Electromagnetic wave signals are transmitted in short time, which can be used in oil-based and water-based mud;

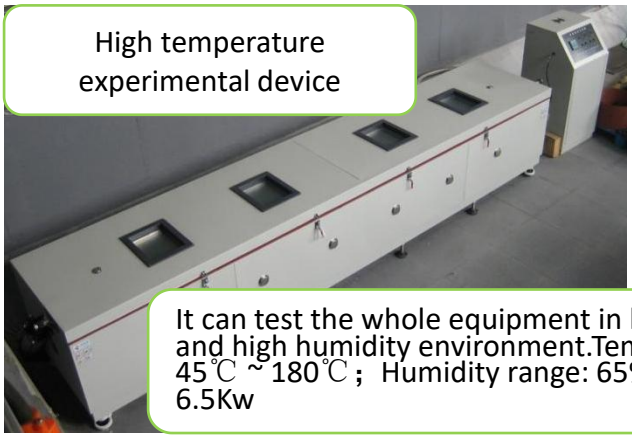
2. It can measure the azimuth gamma of the near bit and the inclination of the near bit (the parameters can be expanded);

3. The receiving sub CAN match the protocols such as 485 and CAN, which is convenient for users to hook.

Near-bit measuring nipple

Near-bit receiving nipple

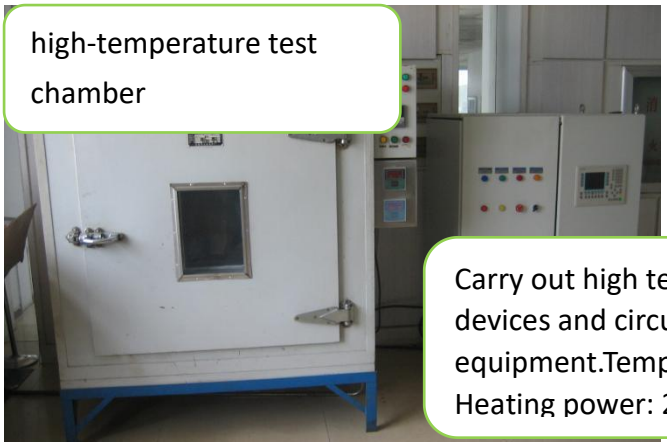
## Ground Test：



High temperature experimental device

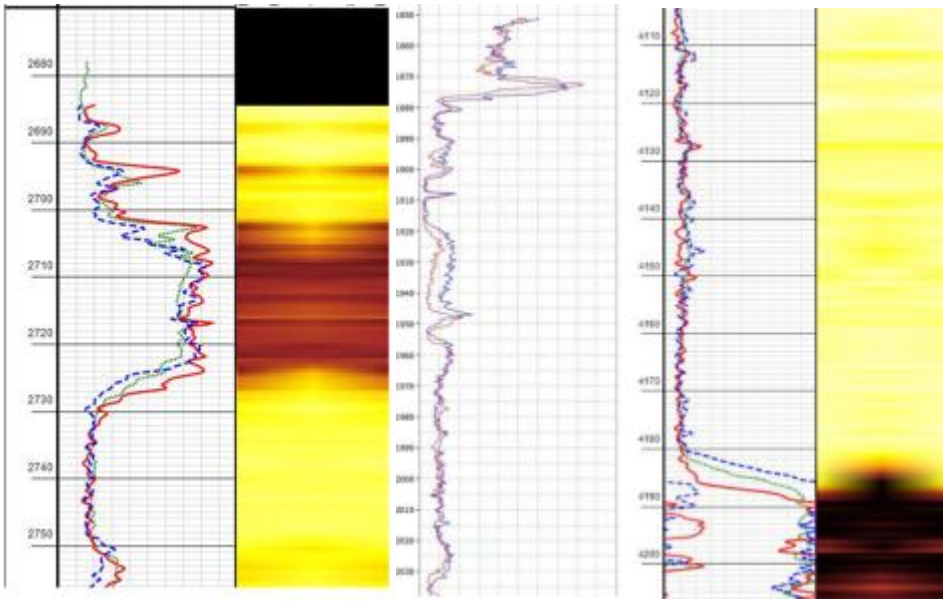
It can test the whole equipment in high temperature and high humidity environment.Temperature range: 45℃ ~ 180℃； Humidity range: 65% ~ 95% RH； Power: 6.5Kw

high-temperature test chamber



Carry out high temperature test on internal devices and circuit boards of the equipment.Temperature range: 0 ~ 300℃；Heating power: 27Kw

## Data processing imaging：



## Technical Parameter：

| Instrument outer diameter | 172/190mm | Measuring short section length | 1.07m |
|---|---|---|---|
| Gamma measurement range | 0～500API | measurement accuracy | ±2API@50API |
| Gamma sector number | 4 | Suitable borehole | 215.9/241.3 mm |
| Deviation measurement range | 0～180° | Short transmission distance | ＞24m |
| Rotational speed measuring range | 0～300rpm | precision: ±2rpm | |
| maximum working temperature | 175℃ | Mud type | oil base |
| peak working pressure | 145MPa | | water base |

| precision | measurement error |
|---|---|
| Near-bit deviation | measurement error≤±0.3° |
| Rotational dynamic orientation | measurement error≤±2.5° |
| vibrate | 20Grms,50-1000Hz |
| lash | 500G,0.5ms(z axis),1000G 0.5ms(x,y axis） |