

# ABIA

## AT-BIT INCLINATION ASSEMBLY

# VECTOR MAGNETICS™

## IMMEDIATE STEERING FEEDBACK

The At-Bit Inclination Assembly (ABIA) is a new addition to the growing line of Vector Magnetics HDD tools. Available as part of a rental motor or as a stand-alone bit sub, inclination at the bit can now be monitored directly - a first for the HDD industry.

The ABIA reduces uncertainty regarding build/drop rates and allows the driller to see results immediately, without the several-rod wait of traditional survey tools.

Inclination is transmitted from the ABIA bit-sub via EM to the ParaTrack2 probe positioned normally in a non-magnetic drill collar. Drill-string inclination is monitored in RivCross software, where inclination trends at the bit can be compared to inclination at the probe, greatly assisting the surveyor in conditions with mixed substrates or when tight tolerances are required.

### Features

- Triaxial, digital accelerometer system
- Compatible with all common HDD pilot hole sizes
- Field rechargeable batteries

### Benefits

- Immediate steering feedback
- Low impact on operations

### Applications

- Underground intersections
- Any project specifying tight inclination tolerances



### Specifications

**OD:** 7.75", 8.5"

**Connection:** 6 5/8" API reg pin x 6 5/8" reg box  
(Customization by request)

**Length:** 8" increase in bit-box length (motor), 21" as sub (with stand-alone motor)

**Inclination:** +/- 0.15° (full roll)  
+/- 0.05° (single toolface)

**Inclination Range:** 0-180°

**Temperature Rating:** 85C

**Pressure Rating:** 6000 psi @22C

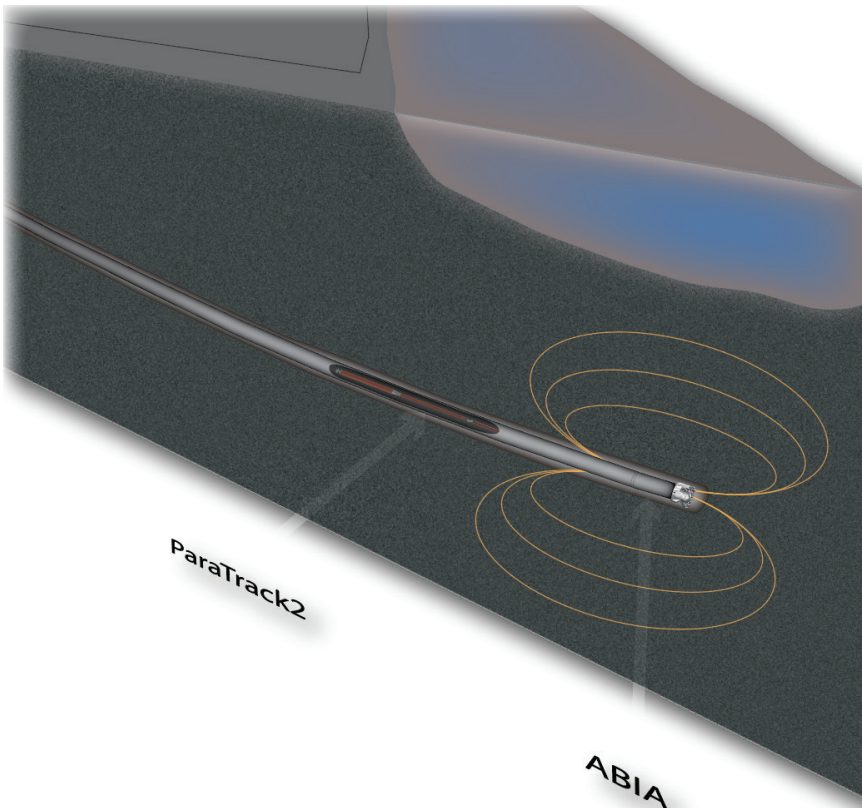
**Survey Time:** 30 seconds

**Battery Life:**

Number of Shots: > 3000

Downhole Standby: > 50 days

Charging Time: 12 hours



*The ABIA provides near-bit inclination readings as much as several rods prior to traditional survey methods*