

WINC Inclination Tool — Advanced Technology

Completely digital and designed with the user in mind, our WINC positive pulse tools provide inclination in real time. The Pumps-On Survey™ is automatic on every connection; no waiting to continue drilling.

WINC Tool (Unmanned Survey Tool)

- Retrievable mud pulse tool
- Can be supplied in a pre-loaded short drill collar, in sizes: 4.75", 6.5", 8.0", 9.5"
- Operating battery life expectancy of 1,000 hours/40 days
- Length is approximately 12 feet
- Inclination accuracy, $\pm 0.10^\circ$ up to 22.5°
- Extreme LCM tolerance; over 100 lbs/barrel
- Integrated rubber fin centralizer
- Operating temperature, $0^\circ\text{--}150^\circ\text{C}$ or $32^\circ\text{--}302^\circ\text{F}$
- Vibration random 20 g RMS, 15-500 Hz
- Shock 1000 g, 0.5 ms, half-sine
- Rated to 20,000 psi

Wireless Display

- Remote access
- Resistive touch screen
- 10.4" rugged LED back-lit display, sunlight reliable
- High environmental performance and reliability
- Doghouse certified when 100-240 VAC, 50-60 Hz, Class 1 / Division 2, ATEX Zone 2, CE, Certified
- Interface with EDR/also auto-recognition
- Auto depth capture with EDR hook-up

Mudlink - The Decoder

- Automatically decodes and displays to RFD: inclination, temperature and battery voltage
- Two minute survey
- Exporting of survey logs
- Dual decoder available



Additional Advantages Include

- Reduce rig time, automatic surveys on connection:
- Cost and time saving alternative to single shot surveys
- Less costly than full MWD
- Used and operated by rig personnel
- Provides fast and accurate well-bore inclination
- Simple, reliable and easy to use
- Minimizes non-drilling time, lessens chances of getting stuck, provides greater well control

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WINC+ Inclination & Azimuth Tool

Winc+ has the ability to provide inclination, azimuth and toolface, so you can keep your hole straight and on target, avoiding costly doglegging and potential hole conditions as a result of not circulating while surveying. Users call it exceptional!

The WINC+ tool is capable of surveying at any point by simply stopping the pumps and restarting them. A survey is reported back to surface while you are drilling ahead, there is no need to wait for the survey to be pumped up — it's done! When used with a steerable assembly, the WINC+ can get you back on target immediately.



The WINC+ System (Unmanned Survey Tool)

- Retrievable mud pulse tool
- 175° C/ 347° F operation
- Simple configuration required, easy one step, high side offset if TF needed
- Inclination accuracy $\pm .10^\circ$
- Azimuth accuracy $\pm .5^\circ$
- Reliable, high LCM tolerant mud pulse technology
- Operating battery life expectancy of 400 hours/per battery and 300 hours/per battery high speed with option to run two batteries
- Remote log-in support and troubleshooting as well as 24/7 phone support
- Supports EDR interface

Software Features

- Easy to use, minimal configuration required
- Survey history stored automatically by job
- No need for end of well gyro costs
- Cost effective solution for monitoring or correcting wellbore deviation

View and edit surveys directly from the WINC Commander software.



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