



The Teledrift ProDrift MWD tool is a self-contained, positive pulse, measurement while drilling tool utilized for straight wellbore drilling. The tool itself is ~6feet long, and fits inside its own 10 foot long steel drill collar. The MWD tool is shipped to the rig site loaded in the drill collar and is ready to be assembled into the BHA by the rig crew or trained Teledrift representative.

KEY BENEFITS

Designed around a new and proprietary mud pulser and a state-of-the-art sensor package, ProDrift MWD provides inclination to the nearest tenth (0.1) of degree.

Combined with a sophisticated, robust, and user friendly surface display, the complete ProDrift MWD system is a "stand alone" MWD tool that can be used by the rig crew with minimal training. The ProView Surface System detects, decodes, and displays the data for the driller. When the survey is complete, the driller enters in the survey depth and accepts or rejects the survey.

- * Latest technology digital system with internal system checks and flags.
- Positive mud pulse telemetry system
- Inclination resolution to .1 degrees.
- Battery powered ~800 hrs. operating life.
- 302 °F maximum operating temperature.
- 30-40 ppb Medium Nut Plug LCM capacity.
- Small surface system footprint with touch-screen controls.
- Simple interface - Operated by the rig crew w/minimal training.
- Low daily operating cost.
- Improved drilling efficiency.
- Higher rates of penetration.
- Reduced overall drilling costs.



PRODRIFT MWD SPECIFICATIONS

Available Tool Sizes

- * 18" - 203 mm 6 5/8" REG
- * 6 1/2" - 165 mm 4 1/2" XH
- * 4 3/4" - 122 mm 3 1/2" IF

Max Operating Pressure

- * 15000 PSI
- * 10.34 MPa

Max. Operating Temperature

- * 150° C
- * 303° F

Flow Rates

- * 100 to 700 GPM
- * 0.38 to 2.64 m³/min

Max. LCM Content

- * 30-40 ppb Med. Nut Plug

Max. Sand Content

- * <7% Optimal

Power Source

- * Lithium Battery Pack
- * ~800 Hours

Transmission

- * Positive Mud Pulse

Inclination Range

- * 0.0° to 23.0°

Inclination Resolution

- * 0.1°

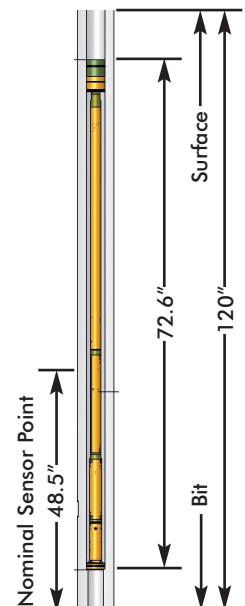
Inclination Accuracy

- * ±0.2°

Inclination Repeatability

- * ±0.05°

The ProDrift MWD tool has an integral Totco ring on the top of the tool should the rig desire to drop a single shot survey instrument onto the MWD tool.



PROVIEW SURFACE SYSTEM

The ProView Surface System is a stand-alone driller's display designed to provide the rig personnel all the functionality required to run the ProSeries MWD tools. This includes:

- Intuitive touch screen controls
- Integrated Data Management
- Survey Reports
- Ability to manually add survey information
- Survey tool management
- Data storage and access capabilities



Intuitive Touch Screen Controls

All functionality of the ProView Surface System is controlled by a color touch screen on the front of the box. The controls and flow of information is designed to be intuitive and user friendly.

Integrated Data Management

The ProView Surface System has built in capabilities to manage the data generated by the surface system and downhole tools. When the well is initiated, a file is generated that is unique to that well. All data collected during that drilling program is stored in that file and can be retrieved by the Well Operator or a trained Teledrift Representative. The driller can determine whether a survey is accepted or rejected, but cannot manipulate the data; thus a permanent record of all activities is generated and kept in the system. Access to job files and survey reports is done with the highest degree of confidentiality, so you can be assured that your data is not accessible to anyone but you.



Survey Reports

the surface system generates survey reports that can be reviewed and downloaded at any time. Survey reports can be downloaded to an external USB jump-drive via a port built into the surface system. They are pre-formatted in an easy to read text file and ready to print out as required.

Ability to manually add survey information

After a sell file has been created, the driller can manually add externally generated surveys to the file for inclusion in the reports if desired. The process is intuitive and the screen controls will guide the driller through the data entry.



Survey tool management

The ProView Surface System offers instructions and readouts to enable the driller to be aware of the survey process at any time. When rotation is stopped, and the rig pumps are turned off, the surface system will inform the user of the steps required to obtain a valid survey from the downhole tool. Each step is carefully documented so that the driller does not have to rely on other inputs to obtain the survey.