



# REFLEX EZ-AQ®

## Multifunctional Survey Tool

Drilling straight holes can be difficult. To capitalise on a drilling investment, reliable knowledge and the ability to determine the exact location of the drill holes regardless of size is needed.

### Key Features & Benefits

- Single and Multishot functionality
- Easy to operate
- Interactive 3D presentation of survey data
- Suitable for narrow holes (AQ size)
- No maintenance needed
- Matrix multiple survey with single download (Recon PPC only)

### Reflex EZ-AQ

The Reflex EZ-AQ, as the name implies, is a digital survey instrument that can be used to record data from AQ coring operations. Being only 25mm in diameter the EZ-AQ can also be used for numerous other slim hole applications within mineral exploration and civil industries.

The Reflex EZ-AQ is an electronic instrument that measures the inclination and direction of a drill hole, together with magnetic and gravity field components. The Reflex EZ-AQ is based on Reflex's proven technology with magnetic and gravity sensors, solid-state magnetometers and accelerometers. This leading technology allows for reliable, accurate and all-angle surveys.

The Reflex EZ-AQ is a multifunctional, user friendly, versatile and economical surveying instrument which can improve the bottom line for those in the mining, exploration, construction, or oil industry.

### Multi Shot, Single Shot, Motor Orientation

The Reflex EZ-AQ is a multifunctional instrument, with Single and Multishot capabilities. The instrument has the ability to survey five Single shots in a row, or up to 9,000 shots in the Multishot mode. Reflex processing software installed on a handheld computer is used with the Multishot option to quickly transfer reliable data via an infrared communication link.

The Gravity Roll Angle and Magnetic Tool Face functions can be used for orientation of wedges, down hole motors and directional core barrels in inclined and vertical holes. The 3D presentation on the handheld computer allows the user to view the orientation immediately and to receive an accurate view of the corrected path.

### Reflex EZ-AQ

The Reflex EZ-AQ performs all-angle surveys. For each shot, three magnetic field and three gravity field components are recorded, together with temperature, time and date. The handheld computer allows comprehensive analysis and presentation of survey data on site. Survey data is displayed in tabular form, as well as in 2D and 3D graphical form. The 3D presentation allows the user to get a realistic view of the perspectives and offers interactive actions such as rotation and zoom.

In magnetically disturbed environments, where the magnetic measurements will not always be reliable, the Reflex EZ-AQ can be utilized to establish standard or background values for the total magnetic field strength and the magnetic dip. These values may be used to filter out suspicious data, which enables recalculation of the drill hole path based on use of the remaining unaffected data.

**The Reflex EZ-COM II** is a robust handheld device with a menu driven user interface, recognised for its simplicity and trouble-free operation. Same as the Recon device, the Reflex EZ-COM II communicates with the instrument via an infra-red data link, avoiding the hazards sometimes associated with radio communications and high power drain of Bluetooth. The EZ-COM II now comes with direct download to USB stick, multi language, and has a more rugged shock and water resistant case - ideal for underground and high rain fall / humidity applications.

**Recon Pocket PC** can be used in situations where a PC/laptop is not available or the higher level processing functions such as 'merge' and 'matrix' are required on site then the Recon Pocket PC is the ideal alternative to the EZ-COM II.



## User Friendly

Despite its advanced technology and capabilities, the Reflex EZ-AQ was designed to be user friendly. The instrument has a built in display with editable options managed by a single control switch and the system can be controlled with a handheld computer. An infrared connection eliminates the need for cables.

The Reflex EZ-AQ is an digital device which immediately presents survey data without any unhealthy chemicals, time-consuming film processing, compass roses or complicated calculations.

# Reflex EZ-AQ Technical Specifications

Reflex EZ-AQ	
<b>Operating Features</b>	Single and multishot modes Inclinometer Variable time delay: 5 to 32.00 s Self contained, battery powered
<b>Azimuth (direction)</b>	Range 0 to 360° Accuracy +/- 0.35°
<b>Roll Angle</b>	Tool face reads to 0.25° Tool face gravity, in degrees Tool face magnetic, in degrees
<b>Magnetism</b>	Magnetic field strength, in nanoTesla Magnetic dip, in degrees
<b>Pressure</b>	6,000 psi (41.4 MPa) or 4,000 metre water pressure without pressure barrel 20,000 psi (137.9 MPa) or 13,800 metre water pressure with 36/38 mm pressure barrel
<b>Temperature</b>	Full accuracy between 0° C to +60° C (+32° F to +140° F) Operates to +70° C (+158° F) ambient temperature without heat shield Operates to +177° C (+350° F) ambient temperature with heat shield
<b>Operating Specifications</b>	Storage -20° C to 85° C (+31° F to +140° F)
<b>Solid State Electronics</b>	Down hole electronic recording Non-volatile memory and data retention Thermal modelling for accurate calibration over the entire temperature range
<b>Dimensions</b>	Outer diameter 25.0 mm (1.0") Length 790 mm (31.126 ") Weight 1.7 kg (1.2 lbs)
<b>Optional Equipment</b>	3 extension rods, each 1.5 m long, 36mm O.D. Landing collar (AQ - PQ sizes) Pin Spear, Swivel or A rod attachment Bull plug and Mule shoe Pressure barrels 36 & 38mm
<b>Handheld Computer</b>	Reflex EZ-COM II
<b>Optional Handheld Device</b>	Recon Pocket P.C.
<b>PC/Laptop</b>	Windows Reflex SProcess (no-) Reflex AQS communication software



Reflex EZ-COM II



Recon Pocket PC

## Rental, Sales & Support

Reflex is a leading global manufacturer of survey and orientation instruments for drill holes. Its product portfolio includes a complete program of borehole surveying instruments for mining, tunnelling, construction, and other geotechnical applications. Reflex is established in all major markets; the Americas, Africa, Europe and Asia Pacific. The success of Reflex is based on its leading innovative technology, customer focus and a network of local service centres world wide.

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