

# KXP-3A1 Portable Digital Inclinometer

## Summary

The instrument is a new manual data recording, economical digital inclination measurement instrument, applicable to non-magnetic mines vertical or directional drilling (hole) and azimuth angle measurements, also applies to non-magnetic mine directional drilling control angle, azimuth measurement deviation, can be widely used measure of pore size greater than 40mm in engineering, hydrology, oil, coal, geological drilling.



## I. Main features

1. Using high-precision gravity accelerometer and three-dimensional magneto-resistive sensors measuring instrument system, the sensitivity is high, the repeatability is good, and the volume is small.
2. Using modern digital signal processing technology, to accurately calculate angle and azimuth, the measurement results to achieve high precision requirements.
3. The application of modern communication coding technology, long cable digital signal reliable transmission, improves the anti-interference ability of the instrument.
4. The inclinometer probe canceled hammer swing member, the instrument greatly improves seismic performance; actual measured depth interval point and measuring points can be arbitrarily chosen, improve measurement efficiency.
5. Using high brightness LCD display measurement results for easy field work and data live recording.

## II. Technical Specifications

1. Inclinometer depth:  $\leq 1200$  m;
2. Parameter measurement range and accuracy: angle measuring range:  $0 \sim 50^\circ$ , measurement accuracy:  $\pm 0.2^\circ$ ;  
Azimuth measuring range:  $0 \sim 360^\circ$ ;  
When the angle  $1 \sim 3^\circ$ : measurement error:  $\pm 5.0^\circ$ ;  
When the apex angle of  $3 \sim 50^\circ$ , the measurement error:  $\pm 3.0^\circ$ ;
3. Measurement: measuring point, the measuring point, and the measured depth interval points arbitrarily determined;
4. Power Supply: AC 220V  $\pm 10\%$ , 50Hz;
5. Ground control unit working environment temperature:  $-10^\circ\text{C} \sim 50^\circ\text{C}$ ;  
Relative humidity:  $\leq 85\%$ ;
6. Inclinometer Probe Working Environment: Temperature:  $0^\circ\text{C} \sim 55^\circ\text{C}$ ;  
Pressure:  $\leq 15\text{MPa}$ ;
7. Ground control unit Dimensions:  $270 \times 220 \times 155$  (mm);  
Weight: 2.4 (kg);
8. Inclinometer probe Dimensions:  $\Phi 40 \times 1600$  (mm);  
Weight: 10 (kg).