

# JTL-40FW Fiber Optic Gyroscope Inclinometer



## Summary

The instrument is a new type inclination measuring instrument which adopts a high precision fiber optic gyroscope. It can be used to determine dip angle and azimuth angle of vertical borehole or direction borehole in a magnetic field or iron casing tube. It can also determine the depth of borehole accurately. It has been widely used in engineering, hydrology, oil field, coal field, and geology for borehole determination.

## I. Main technical features

1. It adopts a high precision fiber optic gyroscope as the measuring component. Small size, long lifetime, good shock and vibration resistance. The zero drift is small. It is the magnetic area and the azimuth angle of the ideal orientation sensor measurement iron casing drilling.
2. It adopts a high precision double-shaft sensor to measure the dip angle. The dip angle data will be collected by 24 bit AD and processed.
3. It is no need to do surface orientation. The true north azimuth angle can be measured at any time.
4. Equipped with special software, it can show test data table, and plot plane diagram, sectional diagram, side projection diagram, and space trace diagram.

## II. Main technical specifications

1. Measuring range: Angle:  $0^{\circ} \sim 50^{\circ}$   
Azimuth:  $0^{\circ} \sim 360^{\circ}$
2. Measurement accuracy: Angle measurement error:  $\pm 0.2^{\circ}$   
Azimuth measurement error:  $< \pm 2^{\circ}$  (angle  $1^{\circ} \sim 50^{\circ}$ )  
The azimuth drift is  $< 0.3^{\circ}/h$
3. Measuring depth: 1500 m (temperature  $< 60^{\circ}C$ )
4. Measurement mode: measuring point
5. Charging Power: AC 100V ~ AC 240V, 50Hz
6. Ambient temperature:  $-10^{\circ}C \sim 55^{\circ}C$
7. Measuring probe dimensions and weight:  $\Phi 40 \text{ mm} \times 1600 \text{ mm}$