

ER-DZP-1 Digital Zenith Photography Position System

Introduction

The Digital Zenith Photography Position System has undergone continuous innovation and improvement, forming a remote automatic monitoring system for vertical deflection, which consists of three parts: Digital Zenith photography, location subsystem, remote control subsystem and alarm warning network subsystem.

Based on the "astronomical geodetic method", we get the geodetic coordinates and astronomical coordinates at the same time, and get the vertical deflection data of the survey stations automatically. Through the network transmission and remote automatic monitoring, we observe and analyze the plumb line deviation data in real time

Application

Geodetic positioning survey, vertical deflection measurement service, precise astronomical survey, earthquake early warning and analysis, crustal tectonic stress field monitoring, regional geoid refinement, military mapping and other fields.

Specifications

Astronomical latitude measurement error	$\leq 0.3''$
Error in the determination of astronomical longitude	$\leq 0.02''$
Mainframe size	$\leq \Phi 430\text{mm} \times \text{H}640$
Host quality	$\leq 54\text{kg}$
Working weather	sunny day and night
Ambient temperature	$-10^{\circ}\text{C} \sim +50^{\circ}\text{C}$

Relative humidity	5%~98% (non condensing)
Storage temperature	-20℃~+60℃
Operational efficiency	One cycle observation≤30min
Average time free time	MTBF≤200h
Average repair time	MTTR≤0.5h
Electromagnetic compatibility	10kHz~1GHz、10V/m to 1GHz~18GHz、50V/m