# 高精度直流激发型质子磁力仪

High precision direct current excitation proton magnetometer

高精度直流激发型质子磁力仪是利用氢质子在地磁场内的进动效应原理研发的高精度测量装置。通过磁传感器的专利设计，降低了噪声干扰，增大了梯度容限。对旋进信号进行数字化处理和精确测频，实现磁场值的高精度测量。

主要技术指标:

- ◆ 测程范围：20000nT ～ 100000nT；
- ◆ 分辨率：0.05nT；
- ◆ 采样周期：3 ～ 60sec；
- ◆ 测量准确度：总场绝对强度50000nT时±0.5nT；
- ◆ 梯度容限：≥ 5000nT/m。

High precision direct current excitation proton magnetometer is a high-precision measuring device developed by using the principle of precession effect of proton in geomagnetic field. Through the patent design of magnetic sensor, the noise interference is reduced and the gradient tolerance is increased. The precession signal is digitally processed and precisely measured to achieve high-precision measurement of magnetic field values.

Specifications:

- ◆ Measuring range: 20000nT ~ 100000nT;
- ◆ Resolution: 0.05nT;
- ◆ Measurement cycle: 3 ～ 60sec;
- ◆ Accuracy: ±0.5nT(of 50000nT );
- ◆ Gradient tolerance: ≥ 5000nT/m.

CZM-863T是对前几代质子磁力仪性能指标的全面提升，可广泛用于地磁场绝对场的观测，应用于如地质、石油、冶金、煤炭等部门的地面磁法勘探以及海洋和航空磁测的地面日变站、地震预报工作中的地磁台站的磁变观测等。

CZM-863T is a comprehensive upgrade of the performance of the previous generations of proton magnetometer, and can be widely used in the observation of the absolute field of geomagnetic field. It can be applied to such as geology, oil, metallurgical, coal and other departments of the ground magnetic prospecting as well as marine and aviation magnetic survey, ground station, the magnetic variation of geomagnetic station observation in earthquake prediction work, etc.