## GTEKGEO INSTRUMENTS PTE. LTD



# FGE-K2 Magnetometer Base Station

#### Overview

The FGE-K2 Magnetometer Base Station is a high-end stable variometer for geomagnetic observatories and variometer stations. This instrument is a tri-axial magnetometer, based on high-end commercially available fluxgate sensor DTU space. The main idea behind the Fluxgate Magnetometer was to construct a reliable and very stable instrument that is easy to set up and operate. There are five outputs of the magnetometer; X, Y, Z geomagnetic components and the temperatures of the sensor and of the electronics. The magnetometers are equipped with a calibration facility, which enables you to test the magnetometer and the data logger from time to time.

An embedded computer is designed to perform continuous unattended data acquisition from the instrument, with capable to record at 1-s sampling as ASCII and compressed binary data file formats. The data files can be provided according to IAGA2002 format and can be automaticly downloaded through the network using FTP protocol.

Info (F1) Plots (F2)	GEOMAG-02MO (F3) PPM (F4) SysMon (F5)	
Plot setup	Plot	
1sec XYZ data	1sec XYZ+F data	
lsec XYZ+F data	43.109 X[nT] (b)	
Minute XYZ+F data	42.979	
Raw suppl. data	42.849	
Minute suppl. data	0.599 YINT 0.599	
Raw F data	0.537	
Raw system mon. data	0.475	
10min system mon. data	16.053 Zin1	
Raw GPS data	15,997	
10 min. GPS data	a computer	
	42863.92	
Numeric values		
w/ time labe	15 42003.77	
X-axis: 85 s	42863.62	
	1.001  dRecTime[sec]	
Font size:	0.999	
	09:27:40 09:28:00 09:28:20 09:28:40 09:29:00	
Saving in 1 s 2016.08.23 09:28:59		



### Specifications

Magnetometer sensors	3-components core fluxgate
Measuring range	±64000 nT
Long term drift	< 3 nT/year
Temperature coefficient	<0.25 nT/°C
Band pass filter	DC to 10 Hz
Bias step	150 nT
ADC resolution	24 bit
Sensor cable	up to 100 meter
Power supply	< 1A @ 12V
Operating temperature	-10 to +40°C

#### **Features**

- ✓ High-end stable 3-axis geomagnetic variometer
- ✓ Very low noise 24-bit A/D converter
- Auto power-on with built-in hardware watchdog
- ✓ INTERMAGNET 1-sec standard
- ✓ Support IAGA2002 data file format
- Automatic data transfer using FTP protocol

Contact Us:



