

**PT. ANUGRAH MULTI INSTRUMEN**

RELIABLE GEOSUPPLIER, RENTAL, SPAREPART & SERVICE

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**Crystal  
Globe**



**EREV-1+ Proton Precision Magnetometer**

# EREV-1+ High-precision Proton Magnetometer

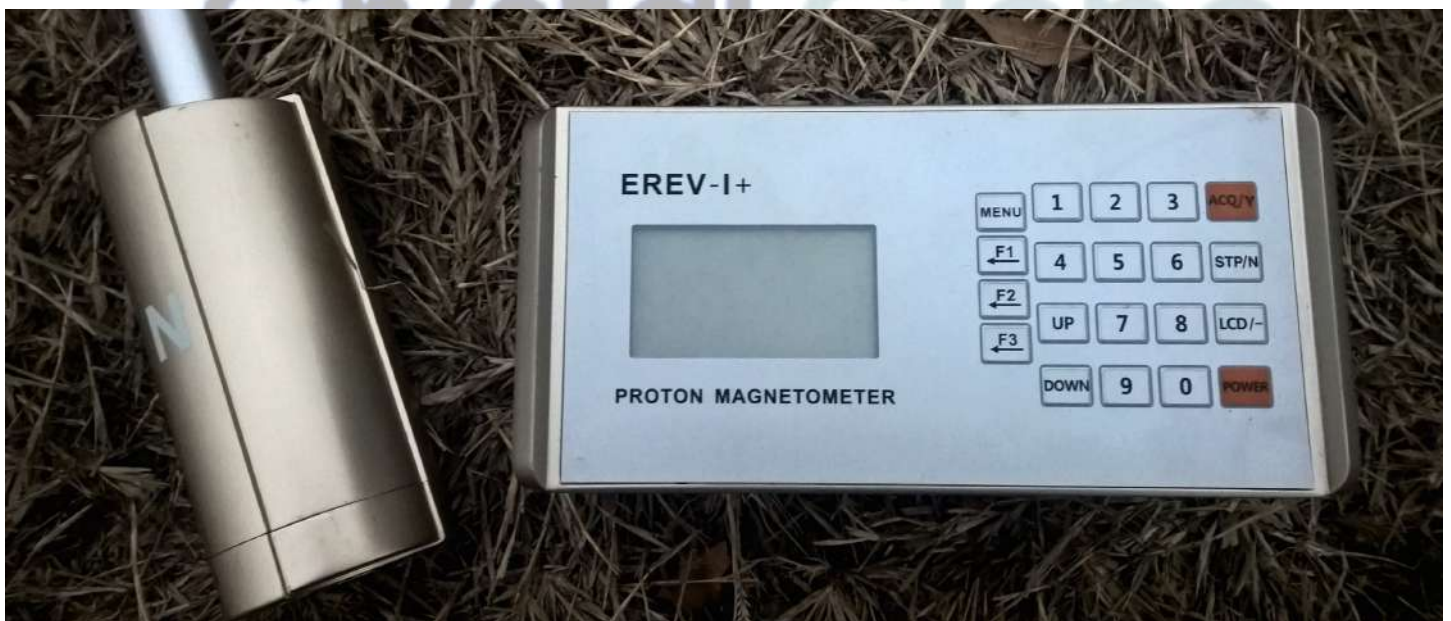
## Feature Highlights

- Highest precision and lowest noise level in the industry
- High sampling rate
- GPS based synchronization between stations to accurately remove diurnal variation
- Unique sampling scheme with synchronization improve the data accuracy and data processing result
- Ruggedized design with lighter weight for harsh operation environment
- High capacity Lithium-Ion battery for longer operation
- Ethernet port for longer term monitoring
- Long range wireless for real-time communication between stations to remove diurnal variation
- Continuous sampling gradient measurement mode shows the lowest level of noise in the market
- Auto tuning in full range, not just in its adjacent range
- Oven Controlled Crystal Oscillator (OCXO) and GPS based timing gives flexibility in all situations
- High accuracy obtained from continuous auto calibration of the clock using GPS, there will be no measurement drift between stations forever
- High capacity SD card with standard 32 GB included
- The two channels in gradient model are identical and can be swapped for repairing with flexibility, this makes gradient model more attractive in term of cost
- Large LCD screen with easy operating menu



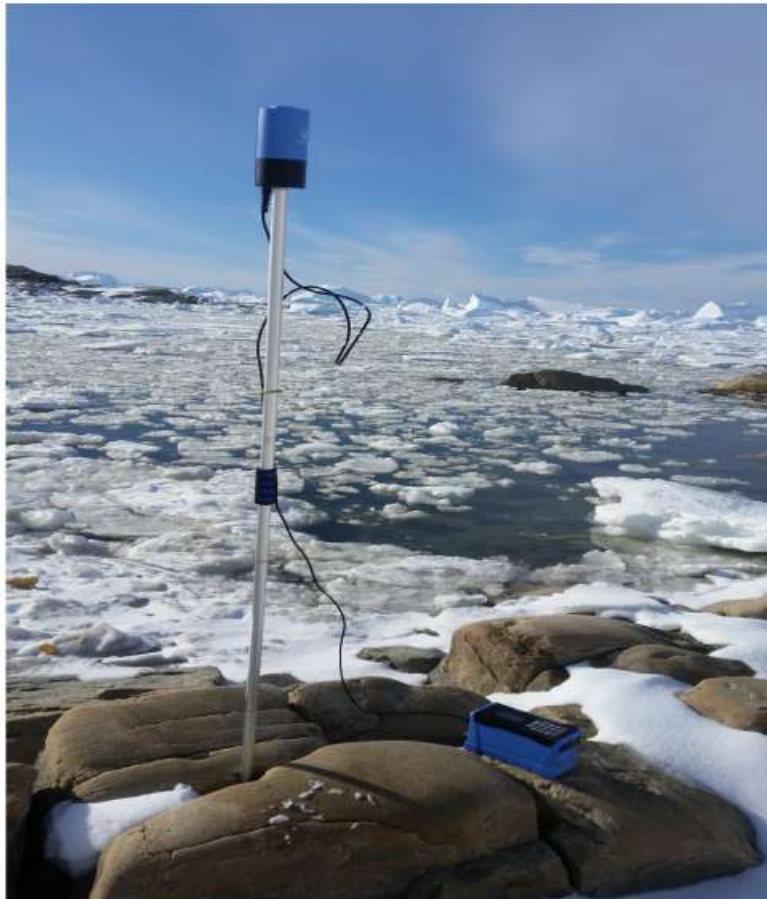
## Package List

- Console
- Sensor
- 4 aluminium poles (50 cm/ea)
- Bottom pole
- Instrument strap
- Battery charger
- USB cable
- Manual
- Processing software: EREV-Link
- Data conversion software: ProtonMag\_Utility
- Transport case



# Specifications

- Accuracy: 0,1 – 0,2 nT in general
- Noise standard deviation: 0,1 nT ( $\geq 3S$ )
- Display resolution: 0,01 nT
- Field strength range: 10000 nT – 150000 nT
- Gradient Tolerance: 7000 nT
- Sampling interval: 1, 2, 3, 4, 5, 6, 10, 12, 15, 20, 30, 60 seconds
- Sampling mode: singel (unsynchronized and synchronized mode); continuous (synchronized mode)
- GPS accuracy: 2,5 m
- Gradient synchronization precision: less than 1us
- Working mode: Four modes (single point, continous mode, gradient and gradient continous mode)
- Data storage: 16 GB SD card included
- PC communication: USB
- Battery: lithium battery (12 V/ 12 Ah)
- Operating temperature: -25°C to +55°C
- Weight: Sensor 0,8 kg; Console 1,9 kg (Batteries include)
- Dimensions (mm): Console (240 x 110 x 125); Sensor (170L x 80 diameter cylinder)
- Data processing software: EREV-Link; include diaurnal variation processing, movement filtering processing, bad point delete, profile drawing



EREV-1 at Antartica



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# Working Mode

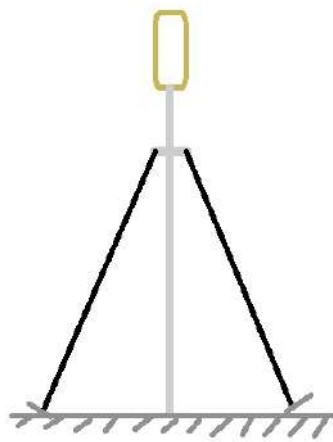
Two types of working modes of [Continuous] and [Single] can be set on the EREV-1+ instrument.

There are 4 working modes for EREV-1+:

- ✓ Single-channel in single-point mode: conventional single-point field work.
- ✓ Dual-channel in single-point mode: conventional gradient measurement field work.
- ✓ Single-channel in continuous mode: daily variation data on diurnal station.
- ✓ Dual-channel in continuous mode: calibrate the instrument accuracy with diurnal influence being eliminated without diurnal station.

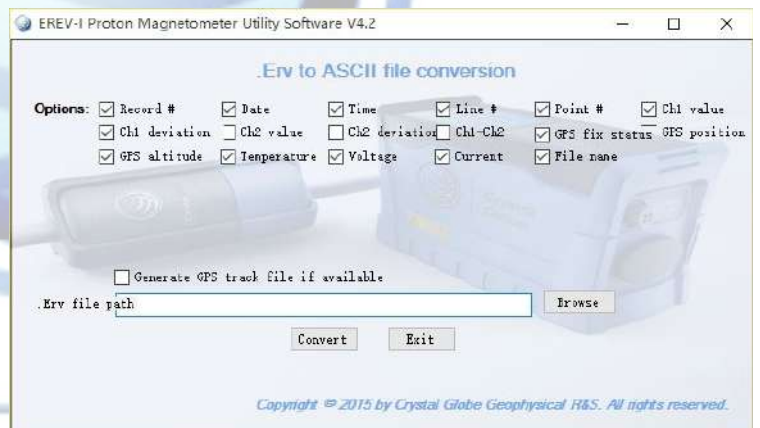


Measuring EREV-1+ on field



3-hole ring disc fixture for securing sensor rods

Diagram of using fixture to secure sensor rods



ProtonMag\_Utility user interface

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