INTRODUCING A NEW GENERATION GEOPHYSICAL SYSTEM

ULTRA-WIDEBAND MT (UMT) SYSTEM

MTU-8A GEOPHYSICAL RECEIVER

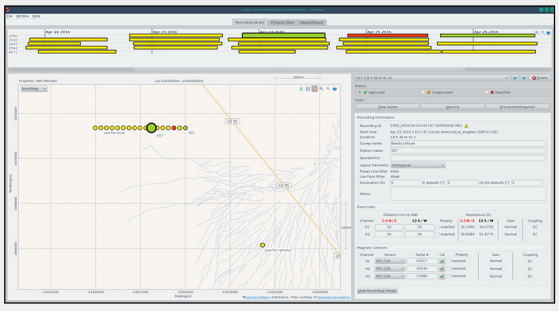


MAIN ADVANTAGES

- One system does it all:
  MT-AMT-BMT-LP (long period)
- Simultaneous recording of high and low bands
- Better resolution in MT and AMT deadbands
- One set of sensors
  One recording
  One processing
  10,000 Hz to > 50,000 seconds

EMPOWER

Advanced System Suite



- Powerful database manager: keep track of your survey progress
- Diagnose, QC operations and data
- Multi Core MT parameter calculation, deliver results immediately
- Advanced editing and processing features
- Open ended development path supported by professional SW team of 10 persons.
- Continuous improvements in processing techniques, released often

July 2017 -- subject to change without notice

Introducing our new UMT (Ultra-Wideband MT) system

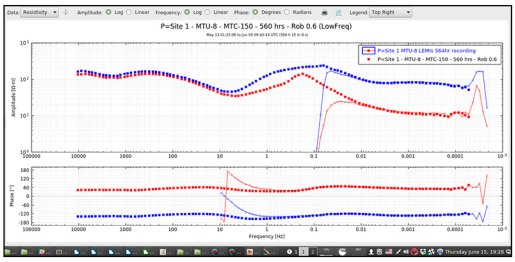
One system does it all!

The new Phoenix UMT system supersedes older separate AMT, MT, BMT and Long Period MT systems. Differentiation of AMT, MT, BMT and LP-MT is no longer required. There is no longer any need for expensive, separate deployments of different systems to capture the necessary spectrum. This simplifies and saves money on procurement, training, operation and maintenance thus providing lowest total cost of ownership (TCO).

Through-the-night acquisition captures AMT data at the optimal time thus greatly mitigates the AMT and MT dead band problem.
Shorter day-time recordings captures the high frequency part of the spectrum and some parts of the low frequency bands , thanks to the simultaneous full spectrum acquisition.

For long periods, high-frequency data is an essential complement for long period (LMT) data; The hi-freq data provides superior inversions of the shallower section, as well as reliably identifying MT static shift. Static shift cannot be identified in widely separated, LP-MT only stations. Without mitigation of static shift, LP-MT inversions always are somewhat uncertain.

Thanks to EMPOWER, our new advanced database management and processing software, operations are extremely simplified. Empower is multi platform and intuitive , any user can easily deploy the MTU-8 to simultaneous acquire the entire spectrum to cover automatically more than 8 decades; this can be done with 2 sets of older sensors (AMT +MT), or a single set of UMT magnetic sensors, model MTC-150 or an hybrid configuration of induction sensors and fluxgate sensors (thanks to the 6 magnetic channels of the MTU-8).
Sensors are automatically detected by the system for easy acquisition and processing.
The system is inter-operable with previous generation of Phoenix MT systems such as the MTU-5A.



Phoenix Geophysics Ltd is the world leader in MT with thousands of systems sold worldwide since 1980.

SPECIFICATIONS

Acquisition mode:
One mode: Ultra Wide MT (UMT: both HF and LF simultaneous)

Sample rate:
24 KHz continuous acquisition, or decimation with sparse 24 KHz and continuous 150 Hz acquisition .
Additional sampling schemes to be soon delivered
A/D conversion: Ultra low noise, true 24 bits

Number of channels:
8 UMT

Sensor connectors:
6x Magnetic sensor connectors, military grade, 10-pin, compatible with broadband MTC-150, MTC-180, MTC-50H, AMTC-30, MTC-80H and most common fluxgate sensors. 20 kOhm input resistance.
2x pairs of rugged electric channel binding posts. 10 Mohm input resistance.

Connectivity:
Ethernet for networking, external WiFi adapter.

Synchronization between instruments:
GPS disciplined, better than 500 nanoseconds

Environmental:
Operating temperature range: -25 to +60 Celsius
IP-68 compliant, water and dust proof

Case:
Ruggedized , monobloc , aluminium case for maximum strength and reduced weight.
Impact resistant, shock mounted architecture, one meter drop test. Tested waterproof immersion.
Ballistic nylon carrying bag for easy transport

Weight and dimensions:
6.4 Kg, 32 x 22 x 14 cm

Udpates:
Easy firmware updates direct from SD card

Ultra Low Power consumption:
5 Watts (for 8 UMT channels)

Dynamic range:
Better than 130dB.

Storage:
Environmentally rugged SD card, up to 512 GB (hundreds of measurements)

Display:
Colour, graphical, low power, 160x128 pixels.

Integrated real time quality control:
Self diagnostics at power up , at recording start and real-time recording statistics. Displayed through the colour screen, live display of levels, instrument status and recording status (GPS, operating mode, diagnostics, sensors detected, etc.). Parallel noise test : automatic acquisition and processing (EMPOWER)

Calibration:
Simple automatic in-field calibration of instrument and sensors for higher accuracy of processed data and advanced system quality control. Comes with default calibration.

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