INTRODUCING A NEW GENERATION GEOPHYSICAL SYSTEM

ULTRA-WIDEBAND MT (UMT) SYSTEM

MTU-5C GEOPHYSICAL RECEIVER

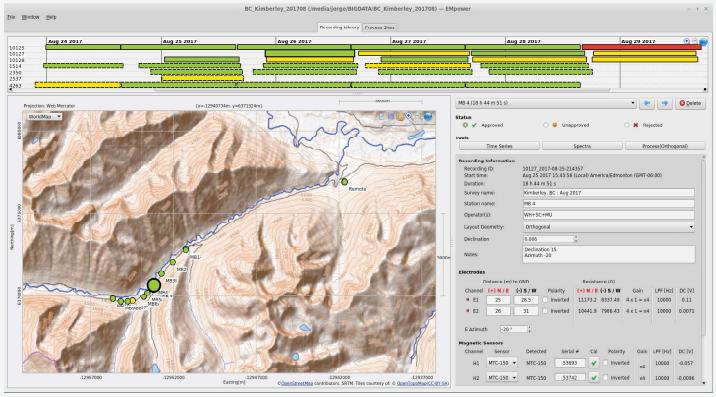
MAIN ADVANTAGES

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, immediate results
- Advanced editing and processing features
- Open development path supported by professional 10-person software team
- Continuous improvements in processing techniques and frequent updates available for download

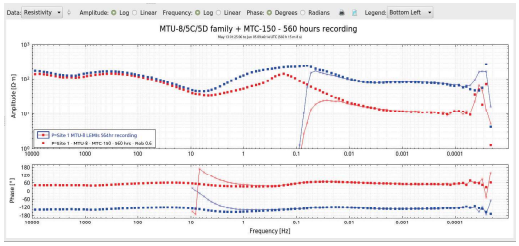
Introducing our new UMT (Ultra-Wideband MT) system

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– with no 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, greatly mitigates the AMT and MT dead band problem. Shorter daytime recordings capture the high frequency part of the spectrum and some parts of the low frequency bands, thanks to the simultaneous full spectrum acquisition.

Thanks to EMpower, our new advanced database management and processing software, operations are extremely simplified. EMpower is multiplatform and intuitive, users can easily deploy the MTU-5C to acquire the entire spectrum to automatically cover more than 8 decades; this can be done with a single set of UMT magnetic sensors model MTC-150. Sensors are detected automatically by the system for easy acquisition and processing. The MTU-5C also works with other receivers of the family including the MTU-8A, RXU-8A, and MTU-2C.



An essential complement for long period (LMT) data, high-frequency data provides superior inversions of both shallow and deep sections as well as reliably identifying MT static shift, which cannot be identified in widely separated, LP-MT only stations. Without mitigation of static shift or high-frequency data, LP-MT inversions are always somewhat uncertain.

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

SPECIFICATIONS

Acquisition Mode
One mode: Ultra Wide MT (UMT: both MT and AMT simultaneous)

Sample Rates
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
5 channels (2E+3H); each with independent gains, filters and sensors

Sensor Connectors
3 Magnetic sensor connectors, military grade, 10-pin, 20 kOhm input resistance, compatible with all Phoenix sensors and most common fluxgate sensors. 2 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 +55 CelsiusIP-66 compliant, water and dust proof

Enclosure
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
4 Kg, L21.5 x H23 x W14 cm

Software Updates
Easy firmware updates direct from SD card

Ultra Low Power consumption
5.5 Watts at 12V (with no sensors connected)

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 Realtime Quality Control
Self diagnostics at power up, at recording start and real-time recording statistics. Displayed on 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 greater accuracy of processed data and advanced system quality control.
Includes generic calibration

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