ULTRA-WIDEBAND MT (UMT) SYSTEM

Versatile family of UMT receivers built on a common platform

MTU-8A
RXU-8A

MTU-5C

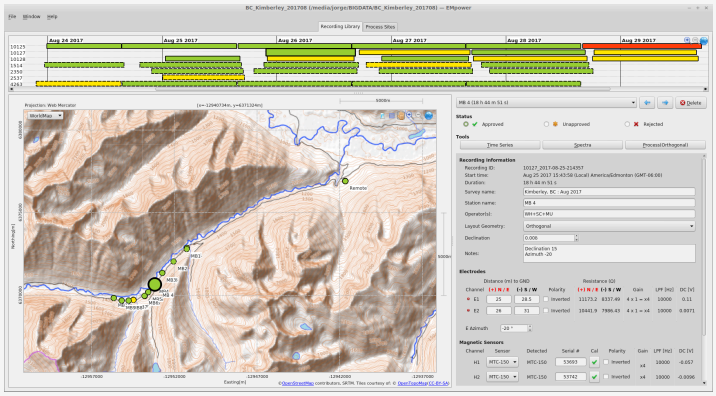
MAIN ADVANTAGES

One system does it all:

- MT-AMT-CSAMT-BMT-LP (long period)
- Only one set of sensors for simultaneous recording of high and low bands
- While recording data:
  - Direct access to live records
  - Real time visualization of processed amplitude/phase
- Better resolution in MT and AMT deadbands
- One recording, one Time Series processing
- 10,000 Hz to >50,000 seconds
- GNSS

EMPOWER

Advanced system suite



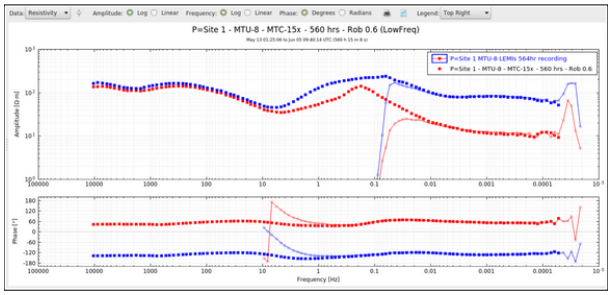
- Powerful database manager: keep track of your survey progress
- Diagnose, QC operations and data
- Multi-core MT parameter calculation, immediate results
- Advanced editing and processing features
- Open development path supported by professional 10-person software team
- Continuous improvements in processing techniques and frequent updates available for download

World leader in MT with thousands of systems sold worldwide since 1980

The Phoenix UMT system supersedes separate AMT, MT, BMT and Long Period MT systems. Differentiating AMT, MT, BMT and LP-MT is not required, and 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).

In addition to the features already known for the MTU-5C family, the new MTU-5C systems offers live access to all Time Series on the internal SD card - No internet required. Direct Field QC and data retrieval can be done without interrupting acquisition, directly from the ethernet port.

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.



EMpower, our new advanced database management and processing software, is multiplatform, intuitive and extremely simplifies operations. EMpower users can easily deploy the MTU-5C to acquire the entire spectrum and automatically cover more than 8 decades by using a single set of UMT magnetic sensors model MTC-100 series. 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 and the RXU-8A.

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 broadband MTC-100 series, AMTC-30, MTC-50H, MTC-80H and most common fluxgate sensors. 2 pairs of rugged electric channel binding posts. 10Mohm input resistance

Connectivity
Ethernet, WiFi, Cellular or Satellite

Synchronization between Instruments
GPS disciplined, better than 500 nanoseconds

Environmental
Operating temperature range:-25 to +55 Celsius
IP67 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
6 Watts

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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INTRODUCING A NEW GENERATION OF GEOPHYSICAL SYSTEM

ULTRA-WIDEBAND MT (UMT) SYSTEM

MTC-155/185 SENSORS

MTC-100 series

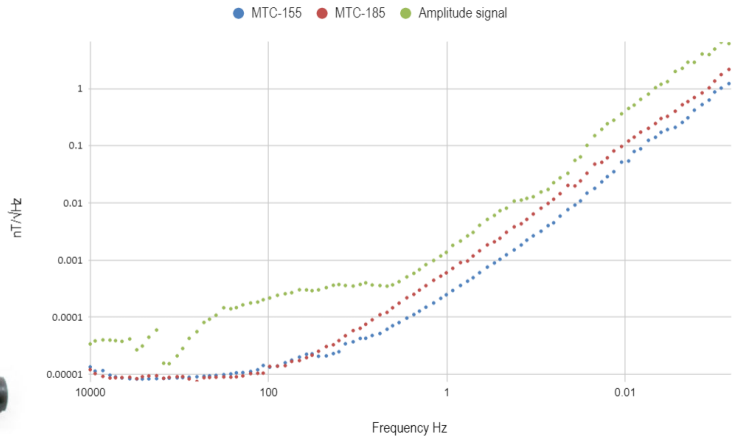
MAIN ADVANTAGES

- Simultaneous, uninterrupted AMT and MT
- Automated detection by the receiver for easier acquisition and processing
- Switch-free sensor
- Improved response in AMT and MT deadbands
- Lightweight
- Low noise levels across bandwidth
- Reduces survey costs and logistics

SPECIFICATIONS

10,000 Hz-10,000 seconds
MTC-155: 144 x 7 cm; 6.4 kg
MTC-185: 92 x 7 cm; 4.5 kg

FIELD OPERATIONAL NOISE FLOOR VALUES



Introducing our new induction sensor family

The MTC-100 Family of sensors

Simultaneous broadband sensors are the new worldwide standard for commercial MT surveys. They are routinely used in North and South America, Europe, Africa and Asia. The use of MTC-100 series decreases operating costs of surveys while improving data quality.

Switch-free technology records *both MT and AMT band simultaneously.*

During overnight MT readings AMT gets collected at no additional cost. A recording of 8 hours of MT will deliver 8 hours of AMT.

With an AMT signal being significantly stronger during the night, AMT readings performed in this fashion are likely to be free of AMT deadband.

The new 100 Series Phoenix Induction Sensors eliminate the decades old artificial division of MT spectrum into combined Audio-Frequency MT (10 kHz to approx. 1 Hz) and MT (approx 400 Hz to 10,000 seconds).

Phoenix sensors and receivers can reach as low as 100,000 seconds by using continuous multiple acquisition days.

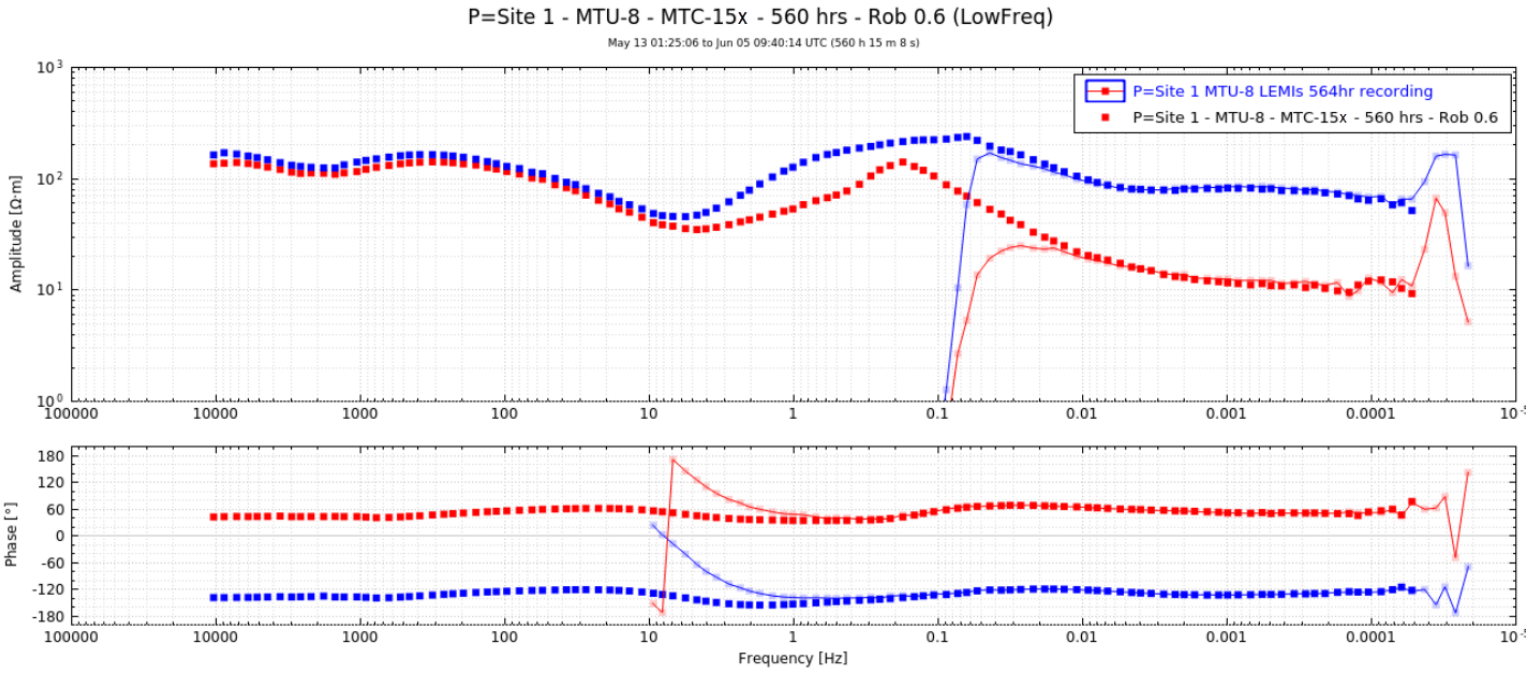
The advantages are so compelling that the 100 series sensors are very rapidly displacing the older separate AMT and MT sensors and becoming the *solution of choice.*

MTC-185 sensors are ideal for measuring the vertical field, or for CSAMT techniques.

MTC-155/185 sensors provide improved stability and automatic serial number reporting.

Over 100 sensors sold every year

ULTRA-WIDEBAND SOUNDING WITH MTC-15X AND FLUXGATE SENSORS



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