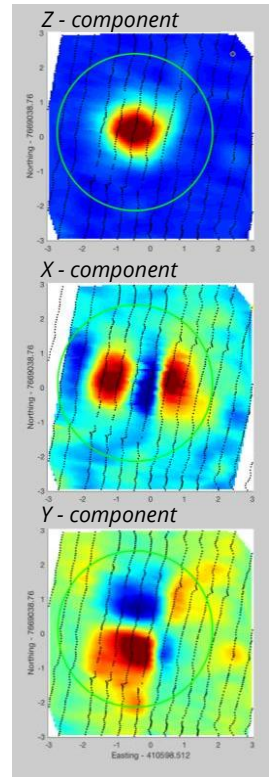




Gap Explosive Ordnance Detection Pty Ltd (GapEOD) is an industry-leading company dedicated to the detection of unexploded ordnance (UXO), lost Ground Engaging Tools (GET) and other metallic objects, both on- and offshore. Our hardware and services are based on innovative geophysical technologies that have proven their success in a wide range of conditions and applications.

The UltraTEM is a next-generation technology that allows for metal object searches with high fidelity. It was developed by GapEOD to overcome problems with outdated equipment common in the industry. The UltraTEM has been validated through the DoD Advanced Geophysical Classification Accreditation program (DAGCAP).

- *The UltraTEM uses three-component electromagnetic receivers in combination with a powerful transmitter.*
- *The high clarity of the data produced allows for dependable discrimination of close-by objects of various sizes.*
- *This translates into investigations that are cheaper faster and smarter.*



UltraTEM Screener

The UltraTEM system configuration is flexible and can be optimized to suit the project requirements. It is available in towed-array, person carried and wheeled cart modes.

The UltraTEM Screener is a more advanced system with improved screening of metallic clutter. The system includes an AHRS unit to provide improved positional data which aids screening capabilities. For system lease the UltraTEM Detector is paired with BTField Pro II which has Pro I capabilities as well as the ability to invert single and multiple objects and perform informed source selection.





Technical Specifications

| | |
|----------------------------------|----------------------------------|
| Dimensions (L x W x H) | System Dependant |
| Data Acquisition Software | BTField by Black Tusk Geophysics |
| Attitude Sensor | Lord Microstrain: 3DM-GX5-25 |

| | |
|--|----------------------------------|
| Weight (approximate) | System Dependant |
| Positioning (Recommended) | Trimble R10 or R12 |
| Positioning (in GNSS denied areas such as under tree cover) | Kaarta Stencil with 1 PPS output |

UltraTEM Screener Transmitter

| | |
|-------------------------------|------------------------|
| Transmitter | EODTx50 Series |
| Transmitter Frequency | 25, 75 Hz or 30, 90 Hz |
| Powerline Frequency | 50 or 60 Hz |
| Power Supply | 24 V Batteries |
| Transmitter Duty Cycle | 50% |

| | |
|--|---------------------------------------|
| Number of Transmitter Loops | 1 - 2 |
| Transmitter Loop Dimensions (L x W) | 0.9 x 0.9 or 0.9 x 1.8 or 1.8 x 1.8 m |
| Loop Wire | 2.5 mm ² |
| Transmitter Current (max.) | 50 Amps |
| Detection Capabilities | 30 mm to 0.6 m 25 pdr to 2.0 m |

UltraTEM Receiver Bank

| | |
|---------------------------------------|----------------------|
| Receiver Coils (3-dimensional) | 6 |
| Coil Effective Area | 104.5 m ² |
| Receiver Noise Level @ 1 ms | 757.25 nV |
| Receiver Dynamic Range @ 1 ms | 122 dB |
| Output Signal Range | ± 9626.74 µT/s |
| Coil Noise Level @ 1 ms | 0.060134 µT/s |
| Least Significant Bit | 120 nV |
| Supply Voltage | 9 to 15 V |
| Power Requirement | 36.4 W |

| | |
|---|--------------------------------------|
| System Noise @ 1000 Hz | < 4 nT/√Hz |
| Receiver Sampling Frequency | 800 kHz |
| Number of Stacks | 4-15 |
| Samples per Decay | 45 log-spaced time channels |
| Decay Length | 0.9 to 10 ms |
| Current draw (6 coils, FG, AHRS) | 2.8 A at 13 V |
| Power Supply | Inspired Energy Lithium Batteries |

