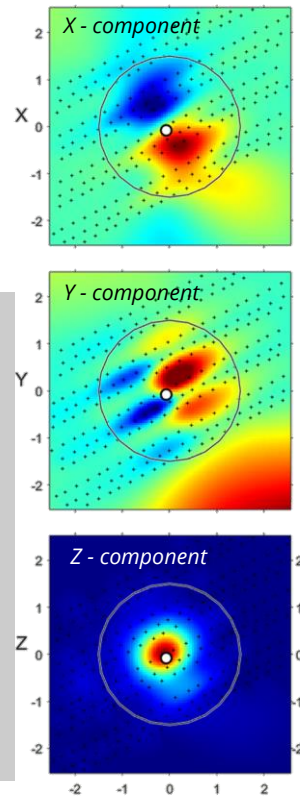




Gap Explosive Ordnance Detection Pty Ltd (GapEOD) is an industry-leading company dedicated to the detection of unexploded ordnance (UXO), lost Ground Engaging Tools (GET) and other metallic objects, both on- and offshore. Our hardware and services are based on innovative geophysical technologies that 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 It was developed by GapEOD to overcome problems with outdated equipment common in the industry.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 Classifier

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 Classifier was designed to operate in a one-pass detection and classification mode rather than the two-pass mode currently used for AGC. The one-pass approach has the potential to significantly reduce the costs and financial risks of UXO remediation as survey costs are only weakly dependent on the number of anomalies per area.





Technical Specifications

Dimensions (L x W x H)	System Dependant	Weight (approximate)	System Dependant
Data Acquisition Software	BTField by Black Tusk Geophysics	Positioning (Recommended)	Trimble R10 or R12
Attitude Sensor	Lord Microstrain: 3DM-GX5-25	Positioning (in GNSS denied areas such as under tree cover)	Kaarta Stencil with 1 PPS output

UltraTEM Classifier Transmitter

Transmitter	EODTx50 Series
Transmitter Frequency	8.33, 25, 75 Hz or 10, 30, 90 Hz
Powerline Frequency	50 or 60 Hz
Power Supply	24 V Batteries
Transmitter Duty Cycle	50%

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

Number of Transmitter Loops	2 - 5
Transmitter Loop Dimensions (L x W)	0.9 x 0.9 or 0.9 x 1.8
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

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

