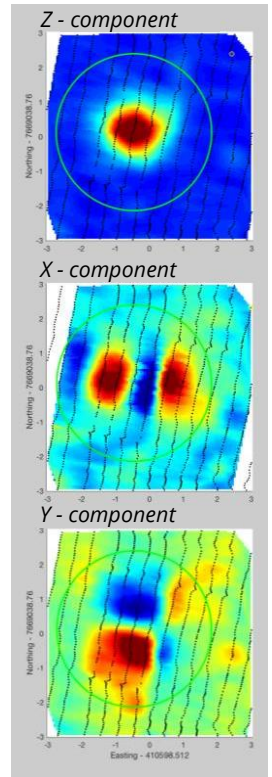




Gap Explosive Ordnance Detection Pty Ltd (GapEOD) is an industry-leading company dedicated to the detection of unexploded ordnance (UXO), lost Ground Engaging Tools (GET) and other metallic objects, both on- and offshore. Our hardware and services are based on innovative geophysical technologies that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 It was developed by GapEOD to overcome problems with outdated equipment common in the industry.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

The UltraTEM system can be deployed in two different primary configurations: (i) Moving Loop that focuses on rapid and efficient large-area searches; (ii) Fixed Loop for Ultra-Deep investigations of deep targets and for operation in geologically hostile terrain. The UltraTEM system has proven its unique capabilities in production surveys for large-area UXO detection, deep bomb detection and detection of Ground Engaging Tools (GET) in mine stockpiles.





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

UltraTEM-GET Moving Loop 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-GET Fixed Loop Transmitter

Transmitter	EODTx200
Transmitter Frequency	25 or 30 Hz
Powerline Frequency	50 or 60 Hz
Power Supply	3-phase Generator & PS10LV PS
Transmitter Duty Cycle	50%

Number of Transmitter Loops	1
Transmitter Loop Dimensions	100 x 30 m
Loop Wire	25 mm ² wire
Transmitter Current (max.)	200 Amps
Detection Capabilities	Large GET to 2.5-3.0 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

