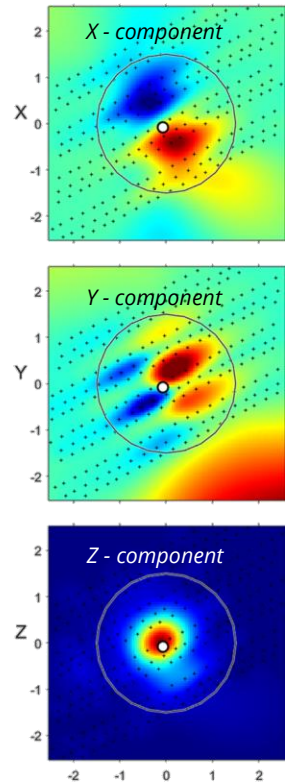




Gap Explosive Ordnance Detection Pty Ltd (GapEOD) is an industry-leading company dedicated to the detection of unexploded ordnance (UXO), lost Ground Engaging Tools (GET) and other metallic objects, both on- and offshore. Our hardware and services are based on innovative geophysical technologies that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 It was developed by GapEOD to overcome problems with outdated equipment common in the industry.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





UltraTEM Configurations

UltraTEM Platform	Target Line Spacing	Max Line Spacing	Production [ha]	Production [ac]	DAGCAP Validated
Towed-Array Classifier (TNB)	2.0 m	2.4 m	2	5	2019
Pedestrian Classifier (TNC)	1.6 m	1.8 m	1 – 1.5	2.5 – 3.7	2023
XC Classifier (TND)	0.6 m	0.8 m	0.5	1	2025

Auxiliary Components

Data Acquisition Software	BTField by Black Tusk Geophysics	Positioning (Recommended)	Trimble R12
Attitude Sensor	Microstrain: 3DM-GX5-25 SBG: Ellipse E	Positioning (in GNSS denied areas)	Kaarta Stencil/Topaz SLAM

UltraTEM Transmitter

Transmitter	EODTx50 Series	Number of Transmitter Loops	2 or 5
Powerline Frequency	50 or 60 Hz	Transmitter Frequencies	8.33, 25, 75 Hz or
Transmitter Duty Cycle	50%		10, 30, 90 Hz
Power Supply	24 V Batteries	Transmitter Current (max.)	50 Amps

UltraTEM Receiver

Receiver Coils (3-dimensional)	6	System Noise @ 1000 Hz	< 4 nT/√Hz
Coil Effective Area	104.5 m ²	Receiver Sampling Frequency	800 kHz
Receiver Noise Level @ 1 ms	757.25 nV	Number of Stacks	4 - 15
Receiver Dynamic Range @ 1 ms	122 dB	Samples per Decay	45 log-spaced time channels
Output Signal Range	± 9626.74 μT/s	Decay Length	0.9 to 10 ms
Coil Noise Level @ 1 ms	0.060134 μT/s	Current draw (6 coils, FG, AHRs)	2.8 A at 13 V
Least Significant Bit	120 nV	Power Requirement	36.4 W
Supply Voltage	9 to 15 V	Power Supply	Inspired Energy Lithium Batteries

