



# ABEM

by Guideline Geo

## TEM product range

High quality instruments for rapid resistivity measurements



Guideline Geo



### Mineral prospectation

Map conductive mineral deposits such as polymetallic high-grade sulphides in mafic rocks.

## The TEM method

TEM (Transient Electromagnetics) is a geophysical technique used to obtain vertical resistivity soundings and a method which responds most strongly to conductive materials.

Depending upon the instrument choice, measurements can be individual static tests (perfect for deep measurements), semi-mobile (for improved efficiency), or mobile for appraising large areas.

The method is non-destructive and uses a series of wire loops for transmitting and receiving signals in the ground so no marks will be left in the survey area after measurements are finished.

Transient Electromagnetic (TEM) methods are unmatched when the goal is rapid, deep-penetrating detection of conductive layers.

## WalkTEM 2

The ABEM WalkTEM 2 is a user-friendly TEM system for rapid groundwater, mineral, and environmental investigations, delivering precise resistivity models directly in the field. Dual Moment measurements provide high-quality data from shallow to deep targets in a single survey. Fast on-site processing allows you to review and interpret results directly in the field. The modular and scalable system supports a wide range of applications and survey depths beyond 800 m.

## GroundTEM i-Series

The ABEM GroundTEM i5, i10 & i20 are user-friendly, app-controlled instruments that complement the existing WalkTEM range perfectly. They make ground-water and environmental TEM surveys more affordable, less complex, and quicker to deploy, with a one-box lightweight solution.



ABEM GroundTEM Ralli Floatation Kit

ABEM GroundTEM Trek

**Groundwater and pollutant mapping**

Identify aquifer pathways and map pollution plumes, including contamination sources and saline intrusion in coastal and stressed aquifers.

**Groundwater prospection**

Locate and map deep groundwater aquifers. Get a rapid overview of potential water-bearing deposits across entire landscapes.

**GroundTEM Ralli and Ralli Floatation Kit**

The GroundTEM Ralli, together with the latest addition, the Ralli Floatation Kit, represents the ultimate mobile solution for rapid, high-resolution subsurface mapping.

As part of the ABEM GroundTEM product line, the system is designed for efficient surveying and delivers precise groundwater and geological data down to depths of 180 m, based on technology developed by our expert partners at TEMcompany.

**GroundTEM Trek**

ABEM GroundTEM Trek maps subsurface geology for applications in hydrogeology, geotechnical surveys, and mining. Its lightweight backpack-mounted transmitter and receiver allow efficient surveying even in remote and rough terrain.

With a depth range of 50–100 m, the system records continuous data with GNSS and altitude tracking.

The wireless system also provides alerts for the users to keep the correct separation during survey.

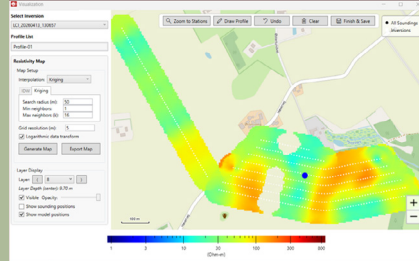
**GroundTEM premium features**

When Premium features are enabled, real-time processing and inversion reveal geological structures instantly in the control app.

## GroundTEM software

The GroundTEM software ecosystem provides a seamless workflow from field acquisition to final interpretation for all GroundTEM systems. The GroundTEM App enables intuitive survey setup and real-time data monitoring, while GroundTEM Connect supports data transferring and management of measurement protocols, and system configuration.

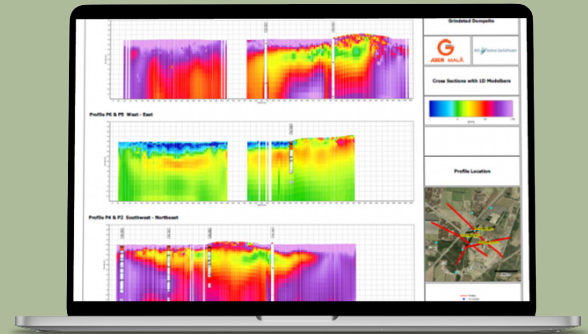
For post-processing and inversion, TEMImage (TEMcompany) offers advanced modelling and visualization tools, including constrained inversion and GIS-based interpretation for detailed subsurface analysis.



## AGS software

The software developed by Aarhus GeoSoftware is a user-friendly solution for processing, inversion, and visualization of geophysical data from a wide range of electrical and electromagnetic methods.

AARHUS SPIA provides advanced processing and inversion for TEM data acquired with the ABEM WalkTEM. Designed for efficient workflows, SPIA enables direct data import, automatic noise and spike filtering, flexible data visualization and generation of reliable resistivity models with full control of the inversion process. Processed data and inversion models are saved in the same SPIA database and can be imported directly into Aarhus Workbench Essentials for easy visualization of the results.



## Guideline Geo

**Guideline Geo is a world-leader in geophysics and geo-technology offering sensors, software, services and support necessary to map and visualize the subsurface.**

We provide complete solutions and applications expertise around the globe in four key growth areas: detecting and mapping groundwater, environmental and geological risk assessments, infrastructure site investigations and mineral exploration.

In 2012 Guideline Geo consolidated its two subsidiaries ABEM and MALÅ to offer unparalleled technical expertise, innovative solutions and world-leading global brands.