ABEM

WalkTEM 2

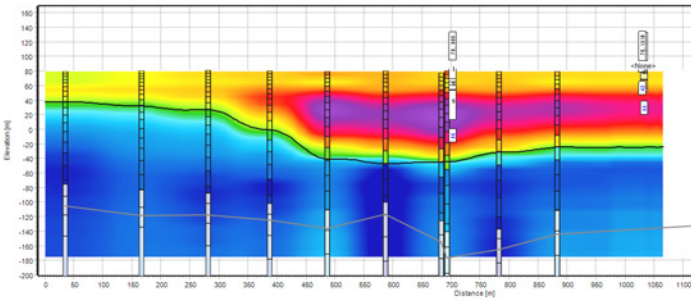
TRANSIENT ELECTROMAGNETICS (TEM)

Groundwater, Minerals & Environmental Survey

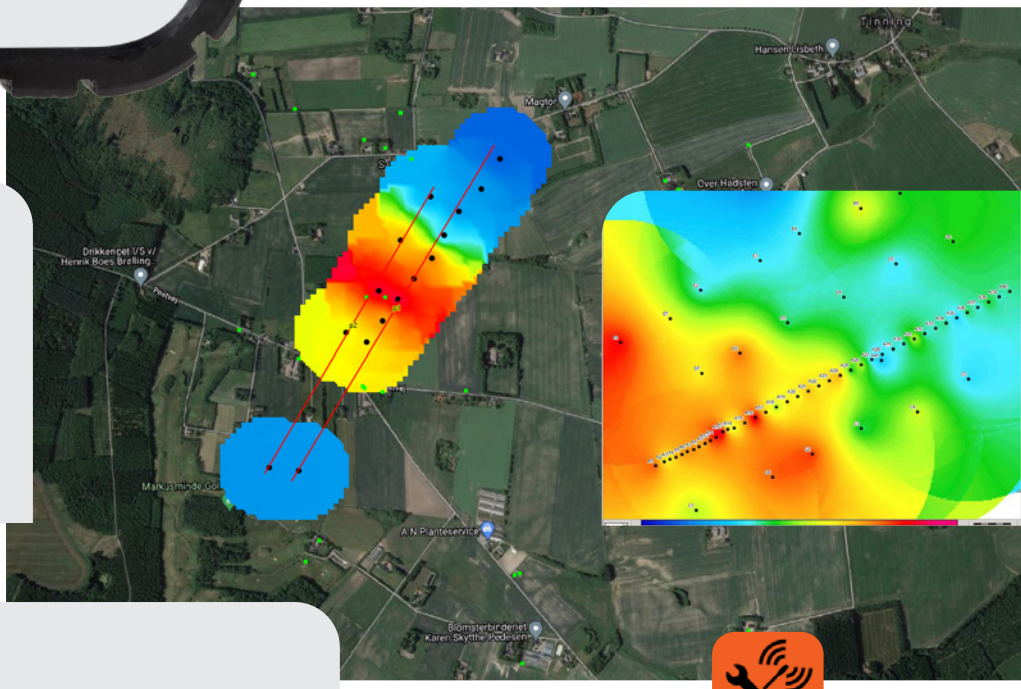
EASY, PRECISE AND RAPID RESISTIVITY SURVEYS

The ABEM WalkTEM 2 is a user-friendly, rapid survey solution that can provide precise resistivity models directly in the field for the search, mapping and monitoring of groundwater, mineral deposits, and environmental change.

Depths of hundreds of metres can be investigated in minutes and the work can be finished whilst other survey methods would still be setting up. The system is scalable, with modular hardware, allowing expansion of the instrument capabilities in line with your changing needs.



Resistivity data from over a buried river channel: pairing the WalkTEM 2 with Aarhus Workbench allows visualization of resistivity results as 2D profiles (above), depth-slices (below) or even 3D volumes.



Precise

Clean and precise data are provided seamlessly from shallow to deep with separated transmitter and receiver units, robust ABS polymer housings, broad dynamic range and dual moment measurements.

Flexible

With a choice of receiver specifications, multiple transmitter models and a range of transmitter loops and receiver coils, the WalkTEM 2 is always a perfect fit. Combined with a unique hardware licensing system, ABEM are able to offer the ultimate scalable solution, with depths of 800+ metres achievable from the largest configuration.

Hardware licensing allows remote upgrade of receiver and transmitter specifications with no need for a return to base.

RX unit

TX 8/20

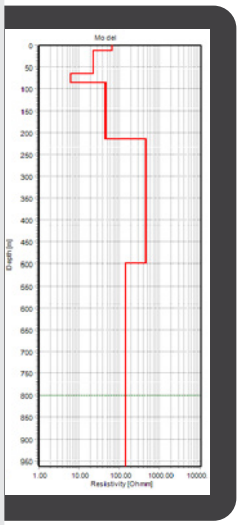
TX 60

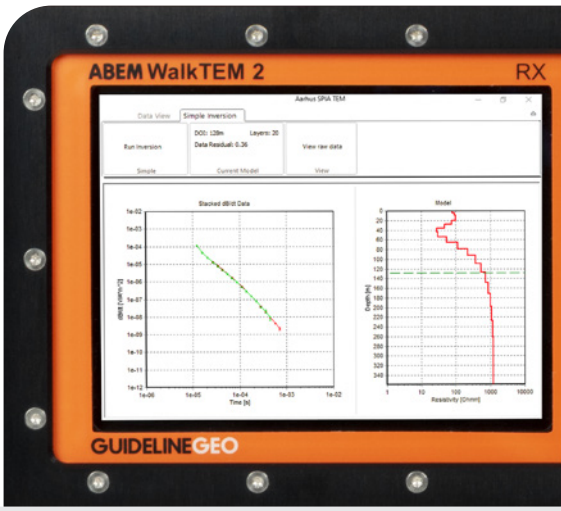
Rapid

User-friendly transmitter loops and receiver coils are fast to lay out and the operator will be quickly into the light and intuitive user interface, mapping in minutes what could take hours or days with other geophysical technologies or drilling.

The unique Dual Moment operation switches between settings suited to shallow and deep soundings automatically within a single measurement cycle. Multiple channels allow the simultaneous use of separate receivers, either sensitive to shallow and deep responses, or configured to measure different components of the returned signal. These 'multi-component' measurements are particularly useful for mineral prospection and complex geological settings. To speed up the processing stage, data from both moments and all channels are recorded into a single dataset, so no need to manually reconfigure the system and repeat readings, or combine separate files after the survey.

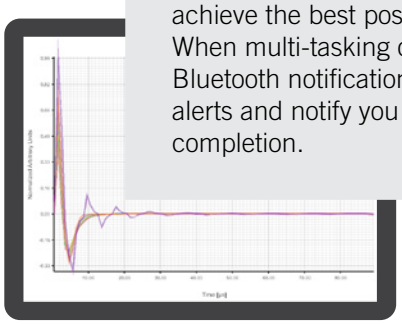
Onboard inversion allows for initial assessment of a site and data to be made there and then, with no need to return to base or even get a laptop out.

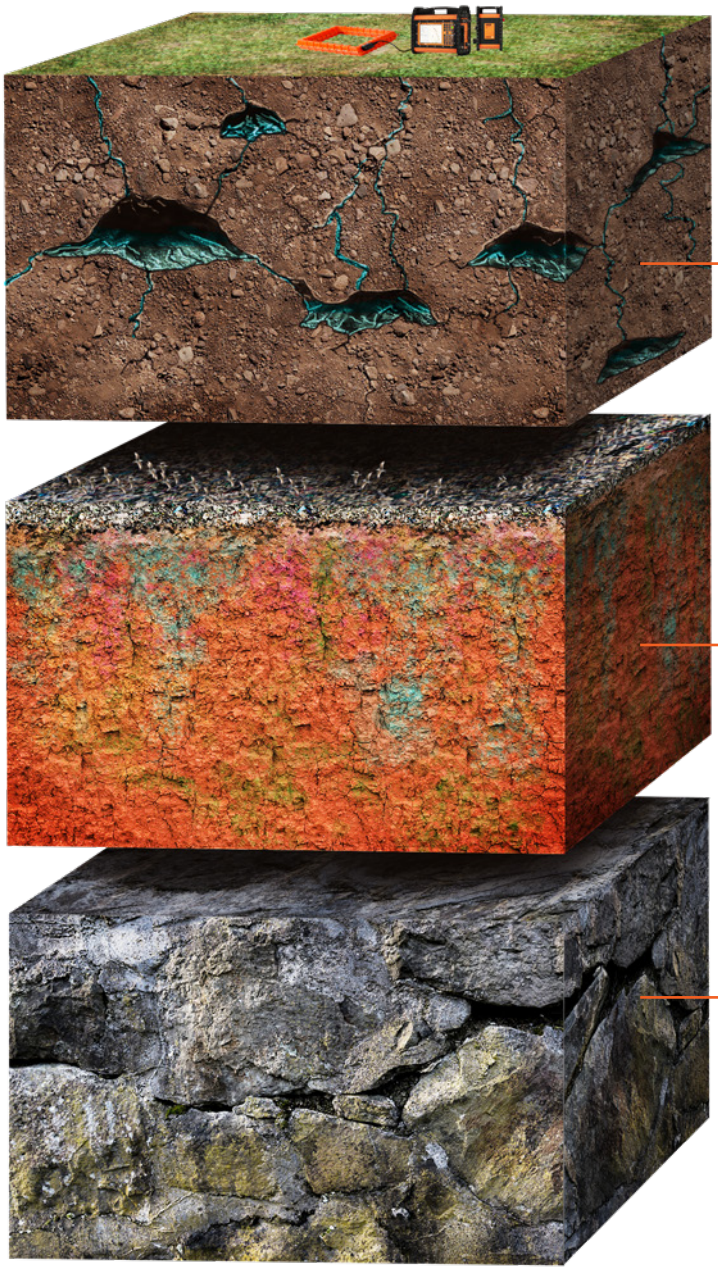




Easy

The built-in damping resistors and waveform analysis tools will simplify the set-up of transmitter loops so that even a relatively inexperienced TEM user can easily achieve the best possible result every time. When multi-tasking on tight schedules, Bluetooth notifications tell you of instrument alerts and notify you upon measurement completion.





Search, Map, Monitor

Groundwater

A high sensitivity to conductive materials makes TEM extremely useful in groundwater studies, for example differentiating between fresh, brackish and saline deposits, monitoring drawdown and recharge of an aquifer, or simply estimating its extents by building up profiles or grids of soundings.

Environmental

TEM provides a rapid means of surveying for a range of environmental applications from identifying potentially hazardous clay units within a geological sequence, to mapping and monitoring dynamic features such as permafrost thickness or potential pollutants.

Minerals

TEM responds well to conductive mineral bodies. With multi-component measurements and the ability to determine chargeability from IP effects in TEM data (using Aarhus SPIA TEM), the WalkTEM 2 is a powerful tool in the search for new mineral deposits.

The TEM method

Time domain transient electromagnetics (TEM) is a non-destructive, rapid tool for the search, mapping and monitoring of groundwater, mineral deposits and environmental change.

Depths of hundreds of metres can be investigated in minutes and the work can be finished whilst other survey methods would still be setting up.

Currents flowing in the TX loop will create a magnetic field (yellow)

The collapsing magnetic field creates electrical currents in the ground

Ground currents create a secondary magnetic field recorded by the RX loop

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GUIDELINE GEO has been in the geophysics business since 1923 and is the global leader in near-surface geotechnology. Our advanced technology ensures practical solutions to everyday, societal, and global problems. We deliver total solutions in the technological fields of ground penetrating radar, seismic, geoelectrical and electromagnetic measurement. The Guideline Geo AB share (GGEO) is listed on Nasdaq First North Growth Market. We are a Swedish company with international offices and regional partners serving clients in over 100 countries.

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