

# ABEM Terrameter LS 2

RESISTIVITY AND IP IMAGING

Performance through scalability

**New Unique  
Scalability**

## ▶ Re-defining greatness

In 2009 the ABEM Terrameter LS was launched, introducing features previously never seen in commercial resistivity meters. The new generation – ABEM Terrameter LS 2 pushes the boundaries even further.

Resistivity/IP surveying is a versatile geophysical method suitable for a broad range of applications and environments such as groundwater prospecting, mineral exploration, geological mapping and geotechnical investigations. System design can vary depending on the application. ABEM Terrameter LS 2 is available in many different configurations to perfectly match your requirements.

ABEM Terrameter LS 2 introduces a unique software licensing system, making it scalable and easy to upgrade. Every instrument comes preinstalled with all hardware modules and software features, but depending on product package not all need be activated. Product packages range from basic to advanced. Upgrades are made by downloading a license code from the internet or USB. Future development will include time-limited licenses, making it possible to rent upgrades.

ABEM Terrameter LS 2 is a standalone solution featuring built-in measurement channels, high power current transmitter, electrode selector, computer and graphical user interface. Surveying techniques range from 1D to 4D measurements. The robust and rugged aluminum casing meets IEC IP66 classification and allows for use in the harshest of conditions.

The measurement channels have a new filter design for improved IP performance. Using a new measurement mode for IP (100 % duty cycle), data collection will be twice as fast and have twice the signal to noise ratio compared to the conventional IP method (50 % duty cycle) using the same settings.

Utilizing new technology alongside upcoming features in the Workbench processing package from Aarhus GeoSoftware, it will be possible to extract spectral information from time-domain IP data.

### Typical applications

- ▷ Geological mapping
- ▷ Geotechnical pre-investigation
- ▷ Groundwater prospecting
- ▷ Mineral exploration
- ▷ Mapping and monitoring of contamination
- ▷ Geothermal prospecting
- ▷ Sub-bottom mapping of marine environments
- ▷ Monitoring of permafrost
- ▷ Archaeology

# ABEM Terrameter LS 2

ABEM Terrameter LS 2 offers up to 12 measurement channels for greater efficiency and productivity in the field. The built-in electrode selector allows for connection of up to 81 electrodes, providing high resolution and impressive depth capabilities. With the use of external electrode selectors over 16 000 electrodes can be connected. Guideline Geo offers a wide range of land, marine and borehole cables.

The built-in field computer in the ABEM Terrameter LS 2 offers increased computing power, an easy to use graphical user interface and connectivity such as USB, Ethernet, Wi-Fi and 3G. The internal GPS supports GLONASS, which improves positioning accuracy. Data is stored on a removable 16 GB microSD memory card, with a capacity of millions of data readings.

Remote connectivity can allow the ABEM support team to assist with software upgrades, give support or troubleshoot if necessary. This unique feature ensures that the system is always up to date, operating correctly, with the risk of downtime kept to an absolute minimum.

## New functionality

- Scalable through software licensing system
- New IP measure mode for faster data collection and better data quality
- 3G and Wi-Fi connectivity
- 16 GB removable and expandable data storage
- Built-in charger for internal battery
- GPS with GLONASS for improved accuracy
- Faster CPU module for a smooth user experience
- New power connector



## Features

- ▷ Up to 12 measurement channels
- ▷ Unique design of measurement channels and high power current transmitter
- ▷ IP measurements with 100 % duty cycle
- ▷ 1D, 2D, 3D and 4D measurements
- ▷ IEC IP 66 classification
- ▷ Wi-Fi and 3G connectivity
- ▷ Software licensing system

## Advantages

- ▷ Optimized for productivity, minimizing field time
- ▷ Outstanding quality of data even in the toughest conditions
- ▷ Measure IP faster and with better quality
- ▷ Basic or advanced measurements, no limitations
- ▷ Rugged and robust – measure anywhere, anytime
- ▷ Remote connectivity allows assistance onsite
- ▷ Scalable and easy to upgrade



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## Designed for efficiency

ABEM Terrameter LS 2 continues its great heritage of adding advanced and useful features to resistivity meters. The graphical user-interface makes it easy to use and the entire user experience is streamlined for productivity. During measurement, the system gives continuous information of data quality, showing results directly on screen. Multichannel arrays, such as the Multiple Gradient, ensure measurement tasks can be completed quickly.

The commitment to data quality and productivity does not stop with the instrument, ABEM software can be used for instrument maintenance, simplifying downloading and processing of data before inversion. After the inversion, visualization tools can be used to make the inversed data more presentable and ready for use in a report. With the new software licensing system the ABEM Terrameter LS 2 is scalable and future-proof, ensuring a return of investment no matter if starting with a basic or advanced system.

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*Guideline Geo is a world-leader in geophysics and geo-technology offering sensors, software, services and support necessary to map and visualize the subsurface. Guideline Geo operates in four international market areas: Infrastructure – examination at start-up and maintenance of infrastructure, Environment – survey of environmental risks and geological hazards, Water – mapping and survey of water supplies and Minerals – efficient exploration. Our offices and regional partners serve clients in 121 countries. The Guideline Geo AB share (GGEO) is listed on NGM Equity.*

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