

Terrameter LS



- Imaging system measuring Resistivity, IP and SP.
- High reliability, safety and robustness under harsh field conditions.
- Easy to use with multi-lingual graphical user interface on sunlight readable colour LCD.
- On-site capabilities for data QA, system diagnostics and fault tolerance.
- Superior quality in data acquisition with powerful transmitter and high dynamic range multi-channel receiver.
- Open communication platform for data exchange, Internet and remote diagnostics (TCP/IP, USB).

ABEM

Technical Specifications: Terrameter LS

Receiver

No. of Channels	4 – 12 input (+ 2 for Tx monitoring)
Isolation	All channels are Galvanically isolated
Input Voltage Range	+ / - 600 V
Input Impedance	200 MOhm, 20 MOhm and 300 kOhm
Precision	0.1 %
Accuracy	0.2 %
Resolution	3 nV at 1 sec integration
Linearity	0.005 %
Range	Operator selected range of measurement + / - 5 V, 20 MOhm + / - 5 V 200 MOhm + / - 600 V 300 kOhm
Flat Frequency Response	better than 1 % up to 300 Hz

Measuring

Resistivity	YES, Full waveform recorded
SP	YES, Full waveform recorded
IP	YES, Full waveform recorded
Dynamic Averaging	24 bit A/D conversion
Data Sampling Rate	30 kHz
Cycle time	from 0.1sec to 30 sec User selectable
IP Windows	Arbitrary windows flexibility configured to powerline frequencies

Transmitter

Output power	250 W
Current transmission	True Current Transmitter
Output Current Accuracy	better than 0.4 %
Maximum Output Current	2500 mA
Maximum Output Voltage	+ / - 600 V 1200 V peak to peak
Instant Polarity Changer	YES
Accuracy	0.4 %
Precision	0.1 %
Self Diagnostics	Temperature, Power dissipation Monitoring
Safety	Emergency Interrupter easily accessible

TxMonitor

Voltage	+/- 600 V
Current	+/- 2500 mA
Full wave from monitored	
Accuracy	0.2 %
Precision	0.1 %

General

Casing	Rugged Aluminum case meets IEC IP 66
Computer	Embedded ARM 9, 200 MHz
GPS	20 channels SirFstarIII chip
Display	8,4" Active TFT LCD, full colour, Daylight visible
I / O ports	2 x KPT 32 p for imaging, AUX 2 x USB, RJ45 for LAN
Service point	Accessible through Internet Multifunction connector
Memory Capacity	More than 1 500 000 readings
Power	Internal NiMH 12 V power pack or Optional External 12 VDC battery
Dimensions (W x L x H)	39 x 21 x 32 cm
Weight	12 kg

Software&Communication

Terrameter LS is controlled using the incorporated Firmware. It has a Graphical User Interface that is easy to follow in all its aspects. Clear and instructive graphics assists the user in the operation of the instrument.

For enhanced Data Quality Control in the field it is possible to display the measured Multi-Electrode Resistivity Imaging data in near real time as a pseudo section. Thanks to access points as USB and RJ 45 (for LAN) transfer of data to other computers is extremely simple.

For full inversion of data external software is required. Most common today is RES2DINV or RES3DINV. This program supports data formats provided with the help of the Terrameter LS software.

Multi-Electrode Survey Systems for 2D&3D for Resistivity, IP & SP Imaging & Monitoring

Switching matrix Internal 10 X 64
Roll-a-Long YES full coverage, both 2 & 3D
All 84 take-outs in a Standard cable array are active for roll-a-long
Array types Default Multiple Gradient,

Dipole-Dipole, Pole-Dipole, Wenner etc.
Take-outs internal 64 inline + 3 remote electrodes
Expandable through Multiconnector up to 16320 electrodes.

Unlimited number via Interconnect cable.
The switch matrix is divided into four blocks for effective use of all receiver channels available.

Electrode Test YES, Focus One and Pair

SASLOG300 logging unit (optional)

Measures both long and short Normal configuration. A lateral configuration is also included. A fluid resistivity cell, a temperature sensor and a water level indicator make it a complete electrical logging device. Refer to the separate leaflet for more details.

FIELD EQUIPMENT IMAGING

Consult your local ABEM distributor for full details of the various configurations available for you. A hint G30-2D = 30 m depth & 2D software.

TerrameterLS Imaging G30-2D	33300201
TerrameterLS Imaging G70-2D	33300202
TerrameterLS Imaging G140-2D	33300203
TerrameterLS Imaging G200-2D	33300204
TerrameterLS Imaging G275-2D	33300205
TerrameterLS Imaging G30-3D	33300206
TerrameterLS Imaging G70-3D	33300207
TerrameterLS Imaging G140-3D	33300208
TerrameterLS Imaging G200-3D	33300209
TerrameterLS Imaging G275-3D	33300210

With reservations for changes; our products undergo continuous development

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