



ET300

24 bit New

GEORESISTIVIMETER WITH 24-48 ELECTRODES, 20 SIMULTANEOUS CHANNELS

ET300 is the new compact georesistivimeter designed for carrying out SEV / geoelectrical surveys. Thanks to its management of 24/48 electrodes and 20 parallel measurement channels, it can acquire multiple datasets simultaneously for each current injection, enabling faster, more stable, and high-resolution geoelectrical surveys. The main feature of this instrumentation is the maximum versatility of use combined with the high speed of execution of surveys, both 2D and 3D. ET300 is managed via a normal laptop or tablet via USB connection. It is equipped with the "preview" function which allows the user to visualize a preview of the pseudo-section derived from the train of data just acquired directly in the field. The use of this function allows the operator to immediately verify the logged data. The instrumentation carries out the measurement or the measurement cycle set by the user in automatic mode. Once the measurement cycle is concluded, the acquired data can be immediately displayed using the "preview" function, the use of which allows the operator to immediately check the recorded data and process it with the relative data processing software

STRENGTHS

- Parallelization of measurements for pole-dipole, pole-pole, dipole-dipole and three-dimensional configurations
- 24-bit resolution
- Pseudosection in real time

Advantages of the MAE ET300 data acquisition architecture:

- Dramatically reduce the time it takes to complete a survey.
- Possibility of tackling investigations that were previously unthinkable, due to the high number of measures required
- Possibility of repeating the measurements several times to minimize the uncertainty, for the same time taken
- Lower energy consumption
- Recording of the standard deviation for each measurement
- Graphical representation with error bars of the measuring points

- Real-time visualization of the pseudo-section of resistivity
- Availability of an automatic repetition function of the measurements with an error percentage greater than a configurable threshold.

Methodologies
Multi-electrode geoelectrical prospecting
Spontaneous Potential Measurement
Induced Polarization measurement
V.E.S. Vertical Electrical Survey

General	
ADC Technology	24bit Delta-Sigma ADC
Number of electrodes	24-48 (with 20 channels)
Array configurations	1D, 2D, 3D
Measurements	Self potential, resistivity, induced polarization
Dimension	40x33x17 cm
Weight	6.3kg
Export compatibility	RESinv, ERTlab, ZondRES, MAE
Roll-along function	Software controlled
Real-time pseudosection	1D, 2D and 3D
Sequence generator	1D, 2D and 3D
Case	IP67
Environmental condition	-20°C/90°C
Power supply	External 12V battery, suggested 100Ah
Average consumption	0.5A, up to 50A peak

Output

General

Power output	300W
Output voltage	$\pm 50V$, $\pm 100V$, $\pm 200V$, $\pm 400V$, $\pm 800V$
Output current	up to 6A at 50V, up to 0.375A at 800V
Energization diagram	Custom from 250ms
Precision	$\pm 0.2 \mu A$
Accuracy	< 0.2 %

Input

Measurements strategy	Parallel
Input voltage	$\pm 25V$
Precision	1.5 μV vs fullscale
Accuracy	< 0.2 %
Input impedance	2.5M Ω
Stacking and noise reduction	Up to 255
Input notch filter	50 Hz
Self potential adjustment	Automatic
IP's windows	Up to 20 windows at 20ms interval

MAE

