ALMAZ Marine

Aquatic system for continuous resistivity imaging and time domain electromagnetic method

- 34 high-precision channels
- Powerful transmitter (600 W) delivers up to 6 A
- Onboard GNSS receiver and optional tail buoy
- Optional echo sounder and resistivity meter
- Optional switchbox for bottom observation
- Towed streamers for surface, bottom and deep-towed surveys

ALMAZ Marine is the most modern system in the World for performing continuous resistivity imaging (ERT and IP) or time domain electromagnetic method (TDEM) with line-to-line configuration. An optional switchbox allows performing resistivity imaging when placing streamers on the seafloor. It is possible to work both in freshwater and saltwater areas up to nx10 m depth. Synchronous data logging on 32 reception channels (MN) provides the highest possible resolution and depth of survey up to ~ 75 m.

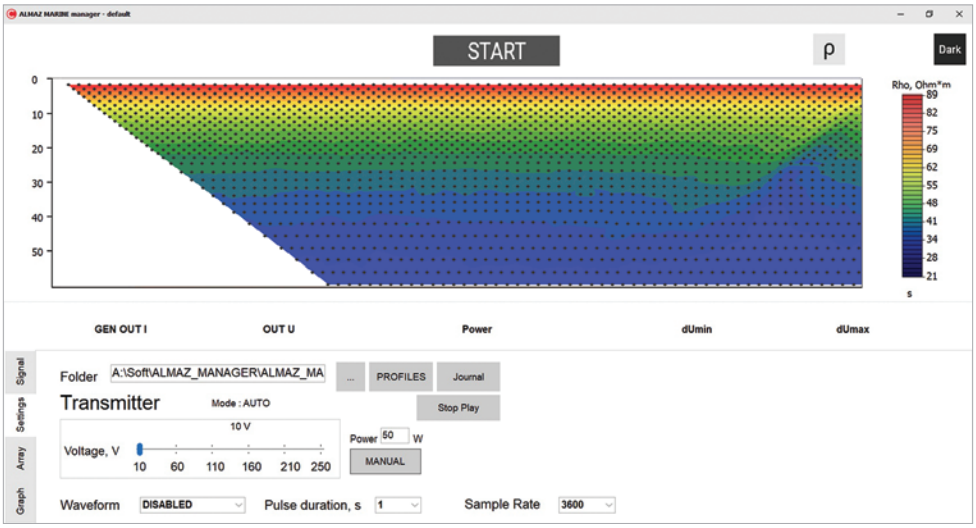
Two different ALMAZ Marine versions support the connection of 64 or 72 electrode streamers respectively with dipole-dipole or gradient arrays. As default, the built-in switch switches 3 arrays, especialy designed for sections with different conductivity.

Coordinate referencing is provided by built-in GNSS receiver and the optional GNSS tail buoy; water resistivity, depth and even water temperature are measured by an optional resistivity meter and echo sounder.

Software

- ALMAZ Marine is controlled from a laptop running under Windows
- Easy setup of measurement mode
- Saving raw and / or processed data for subsequent inversion

Number of MN measuring channels	32
Supported arrays	Dipole-dipole and gradient
MN channel dynamic range	Channel 1: +/- 20 V; channels 2-32: +/- 10 V
MN channel offset correction	Channel 1: +/- 20 V; channels 2-32: +/- 10 V with 1 mV accuracy
Input voltage protection on MN channels	+/- 75 V
MN channel resolution	0,1 µV
Input impedance	5 MOhm
MN channel gain factors	1, 2, 4, 8, 16, 32, 64, and 128
Voltage measurement accuracy	1%
Additional measuring channels	Transmitter signal current and voltage measurement - 2 channels
Transmitter maximum output power	600 watts
Maximum output current	6 A
Maximum output voltage	+/- 300 V (600 V peak-to-peak)
Current measurement accuracy	1%
Output current waveform	Meander (ON+/ON-) or meander with pause (ON+/OFF/ON-/OFF)
Operating frequency of the transmitter	0 - 72 Hz
Sampling rate of channels	Standard: 3 600 Hz On request: 7 200 Hz
Additional interfaces	2 × RS-232
Number of electrodes in the streamer	64 or 72
Standard distance between electrodes in a streamer	2.5, 4, or 5 m
GNSS receiver	External with RS-232 (NMEA 0183) connection with the ability to record RAW data. Received signals: GPS L1C/A and L2C; GLONASS L1OF and L2OF; Galileo E1B/C and E5b; BeiDou B1I and B2I; QZSS L1C/A, L1S, and L2C. SBAS: WAAS, EGNOS, MSAS, GAGAN, SDCM.
Power	24 V battery or 100-240 V 50/60 Hz AC
Operating temperature range	-20 ÷ +60 °C



Designs, manufactures, supports and supplies
Equipment & Software for geophysical surveys:

- Seismic
- Geoelectric & Electromagnetic
- Magnetic
- Gamma radiation detection