

Akula 9000B

Datasheet



Akula 9000B is Geoscanners' longest available and most often sold GPR radar control unit. The great amount of features and large number of system configuration possibilities all contribute to Akula 9000B's popularity.

Because Akula 9000B is compatible with Geoscanners' antennas with center frequencies up to 1000MHz, depending on the configuration, it covers the needs of multiple survey industries. From geological to concrete surveys, the feature rich Akula 9000B will provide excellent results and successful surveys. Each user receives a system tailored for their particular needs thanks to the large number of antennas that can be used with Akula 9000B.

After owning the initial system, customers can easily access the rest of the configurations. If the survey needs change over time, the user can still use the same Akula 9000B control unit with additional antennas from the list of compatible antennas.

The GPR operators will enjoy an easy and intuitive software interface that provides them with full control over all the parameters involved in making a fast and successful survey.



Area of Application

- Utility Location with wide antenna selection between 100-1000MHz.
- Concrete inspections with the GCB-700 and GCB-1000 antennas.
- Geological exploration with the lower band antennas GCB-100 and GCB-200.
- Rough terrain inspection with the FLB antenna series.
- Borehole data collection with the borehole antennas.
- Archeology with any of the GCB antenna selection between 100-1000MHz.



Mechanical and Environmental Specifications

Dimensions LxWxD (mm/inches)	305x240x55 / 12x9.44x2.16
Weight (kg/pounds)	2.45 / 5.4
Fastening points LxW (mm/inches)	197x186/ 7.75x7.32
Ingress Protection*	IP54
Operating Temperature (°C / °F)	from -20 to +50 /from -4 to +122
Relative Humidity (%)	96 (NC)

*Mounted on recommended survey accessories and carts

Electrical and Operating Specifications

Power Consumption (Watts)	7
Power Supply (Volts)	+10.8 to 14
High Tension Output (Volts)	150
Survey Wheel Power Output (Volts/Amps)	5.01 / 0.2
Analogue Bandwidth (MHz)	5-1700
Pulse Repetition Frequency (kHz)	200
Scan Rate (traces/second)	1-100
Resolution (ps)	62.5
Survey Range (ns)	32-1024
Offset Range (ns)	+/-128
Amount of samples/trace	128-4096
Software Gain (dB)	-20 to +60
Hardware Gain (dB)	N/A
Number of Channels	1
Vertical Filters	LP & HP IIR and FIR
Horizontal Filters	Stacking, Background removal, Dewow,DC
Operating Modes	Time, Distance, One Shot
Data Storage	Hard disk, USB Mem Stick, Flashcard
Data Format	16-bit data in proprietary GSF Format
Interface	USB2.0
Control Software	GAS
Compatibility	BA-100, BA-500, BA-1000, GCB-100, GCB-200, GCB-300, GCB-400, GCB-500, GCB-700, GCB-1000, FLB-390
Interface Languages	English, Swedish, Spanish, Russian, Croatian, Chinese, French, German, Italian, Turkish

Included Parts

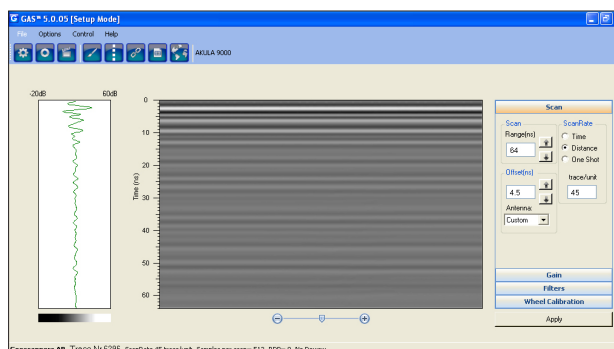
- Akula 9000B control unit
- AKACASE transit case
- CTR-90x Main control cable. Standard lengths 0.6m, 3m, 6m or custom length
- NKUSB-1 High performance USB cable
- BAT-9000 Lead Acid 12VDC/7h battery in its own pouch
- CHR-103 Charger for Lead Acid battery
- Hard Copy user manual with declaration of conformity

Accessories*

- AKABAT1201 Holder with connector for Akula systems lithium Ion Hydride battery
- AKALION Lithium Ion Hydride battery for Akula series of control units
- SVC-820 standard 4 wheel cart with survey wheel
- SVC-821 standard 2 wheel cart with survey wheel
- GSH-49x G-trail (Scorpio) configuration single wheel cart
- HDR-93x rough terrain holder for Akula 9000 series control units (for Scorpio configuration)
- SKABSG Sun shade for Akula 9000 series of control units
- AKAC AC adapter for use with mains from 110 to 250V

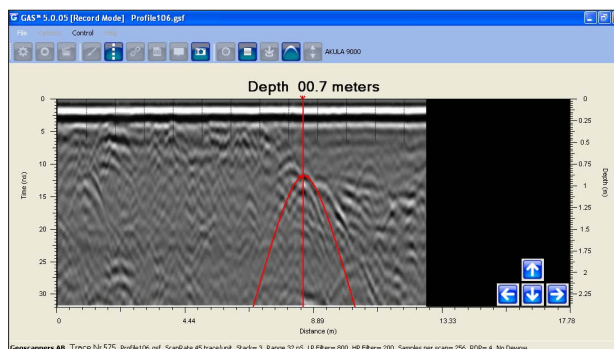
*Accessories are not included

Quick and intuitive interface with fluid operation makes the life of the GPR operator that much easier. Every parameter of the Akula 9000B radar control unit can be tuned to collect the best quality data in surveys.



1. GAS software setup mode

Additional tools are available to assist during the surveys. Depth calibration is one of the most useful tool that the users will have great benefits from. Calibrating the depth while collecting the data can allow making interpretation directly on site.



2. Using the hyperbola fitting tool

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