The SuperSting™ with Wi-Fi® is a portable resistivity, induced polarization (IP), and self-potential (SP) instrument with memory storage and user-defined measure cycles.

Five Versions available:
SuperSting R1/IP/SP Wi-Fi: Single channel version
SuperSting R2/IP/SP Wi-Fi: Two channel version
SuperSting R4/IP/SP Wi-Fi: Four channel version
SuperSting R6/IP/SP Wi-Fi: Six channel version
SuperSting R8/IP/SP Wi-Fi: Eight channel version

Future Proof
Buy only what you need to get the job done and upgrade for faster speed later by adding more channels.
Straight forward pricing. No additional fees for upgrading. Only pay the difference.
All SuperSting versions are upgradeable to a max of 8 channels.
You can upgrade at any time via email, phone or online. License code will be sent to you electronically.
Permanent Upgrade. No yearly licensing fees. You pay once and own it forever.
No need to send your instrument to the factory to upgrade.
As your business grows you can expand your capabilities.
Everything is modular i.e. increase channels, multiple SwitchBoxes.

Accessories

- The SuperSting comes with a built-in 200 W transmitter. A series of external high-power, 5-15 kW, transmitters are available for deep IP surveys.
- AGI's **EarthImager** inversion software for 1D, 2D and 3D data processing.
- **SuperSting Remote** for resistivity, IP and SP time monitoring in remote & hard-to-access areas.
- Cables for land, borehole and underwater surveys.
- Electrode streamers for towed marine surveys.

Applications

- Used for resistivity and IP imaging in 2D, 3D and 4D.
- Borehole-to-borehole, and borehole-to-surface measurements.
- Underwater measurements in fresh and salt water.
- Deep IP mineral exploration using the external power transmitter **PowerSting** (5 - 15 kW).
- Ground water exploration.
- Geotechnical investigation for depth to bedrock, cavity detection, stratigraphy and more.

SuperSting with Wi-Fi

AVAILABLE AS EIGHT- OR SINGLE-CHANNEL MEMORY EARTH RESISTIVITY, SP & IP METER

TECHNICAL SPECIFICATION

SuperSting:

Measurement modes	Apparent resistivity, resistance, induced polarization (IP), SP & battery voltage.
Measurement range	+/- 10Vp-p.
Measuring resolution	Max 30 nV, depends on voltage level.
Screen resolution	4 digits in engineering notation.
Transmitter	200 W internal transmitter; external 5 kW, 10 kW and 15 kW transmitters are also available (see separate brochure for specifications).
Output current	1 – 2,000 mA continuous, measured to high accuracy.
Output current resolution	better than 1 μ Ampere at 3.6 seconds measurement time.
Output voltage	800 Vp-p, actual electrode voltage depends on transmitted current & ground resistivity.
Input channels	Six models are available; 1, 2, 4, 6, and 8 channels. Lower channel models are later upgradable to higher number channels.
Insulation	Transmitter and receiver are galvanically insulated.
Input gain ranging	Automatic, always uses full dynamic range of receiver.
Input Voltage Protection	Up to 1000V.
Input impedance	>150 MΩ.
SP compensation	Automatic cancellation of SP voltages during resistivity measurement. Constant & linearly varying SP cancels completely.
Type of IP measurement	Time domain chargeability (M), six time slots measured & stored in memory.
IP current transmission	ON+/OFF/ON-/OFF.
IP time cycles	0.5 s/1 s/2 s/4 s/8 s.
Measure cycles	Running average of measurement displayed after each cycle. Automatic cycle stop when reading errors fall below user-set limit or user-set max cycles are done.
Signal stacking	The SuperSting can be set to perform up to 300 cycles. The running standard deviation is calculated and displayed. The measurements are interrupted and data including standard deviation is stored once the running average is within the user selected error percentage.
Resistivity time cycles	Basic measure time is 0.2/0.4/0.8/1.2/3.6/7.2 or 14.4 s as selected by user via keyboard. Auto-ranging & commutation adds about 1.4 s.
Signal processing	Continuous averaging after each complete cycle. Noise errors calculated & displayed as percentage of reading. Reading displayed as resistance (ΔV/I) & apparent resistivity (Ωm). Apparent resistivity is calculated using user entered electrode array coordinates.
Noise monitoring	The receivers automatically run an autorange routine before the measurement starts, in order to determine gain settings and monitor the signal before starting the actual measurement.
Noise suppression	Better than 100 dB at f>20 Hz. Better than 120 dB at power line frequencies (16 2/3, 20, 50 and 60 Hz) for measurement cycles of 1.2 s & above.
Total accuracy	Better than 1% of reading in most cases (lab measurements). Field measurement accuracy depends on ground noise & resistivity. The instrument will calculate & display running estimate of measuring accuracy.
System calibration	Calibration is done digitally by the microprocessor based on correction values stored in memory.
Supported configurations	In manual mode; resistance, Schlumberger, Wenner, dipole-dipole, pole-dipole, pole-pole. In automatic mode; any configuration can be programmed.
Operating system	Stored in re-programmable flash memory. New version can be downloaded from the AGI web site & stored in the flash memory.
Data storage	Full resolution reading average & error are stored along with user entered coordinates & time of day for each measurement. Data is automatically stored in a job oriented file system.
Data display	Apparent resistivity (Ωm), current intensity (mA), & measured voltage (mV) are displayed & stored in the graphical display and control device and is also displayed in real time as bright color pseudosections, IP curves, transmitter/receiver plot, contact resistance measurements & more. Instrument LCD is used as back-up display.
Memory capacity	Virtually unlimited data storage in real time on controlling Android device. The internal SuperSting memory can store more than 79,000 measurements (resistivity mode) & more than 26,000 measurements in combined resistivity/IP mode.
Data transmission	Data is instantaneously transferred from the graphical display and control device by email or by file transfer from the device's USB port.
Automatic multi-electrodes	The SuperSting is designed to run dipole-dipole, pole-dipole, pole-pole, gradient, Wenner and Schlumberger surveys including roll-along surveys completely automatically, with the patented (Pat.# 6,404,203) Dual Mode Automatic Multi-electrode system or a passive electrode cable system. The SuperSting can run any other electrode array by using user programmed command files.
GPS	Included in the graphical display and control device.
Camera	Included in the graphical display and control device.
User controls	The instrument is controlled from the graphical display and control device or from the instrument key board.
Display	Mobile 10" bright color display. Back-up screen: graphics LCD display (16 lines x 30 characters) with nightlight.
Power supply, field	12V or 2x12V DC external power, connector on front panel. Optional AC/DC power supply & motor generator.
Power supply, office	DC power supply.
Operating time	Depends on survey conditions & size of battery used. Internal circuitry in auto mode adjusts current to save energy.
Operating temperature	-20 to +50°C.
Weight & Dimensions	10.9 kg (24 lb.), width 184 mm (7.25"); length 406 mm (16") & height 273 mm (10.75").

SuperSting Manager App:

Device	Used with various Wi-Fi capable Android devices such as mobile phones, 7-inch & 10-inch tablets.
Android™ version	3.2 -4.4
Functions	All functions performed using the SuperSting's keypad can be performed using the App's GUI with the exception of baud rate setting.
Real time quality assurance	Color pseudo-section plot, transmitter/receiver pair plot, IP curve plot, contact resistance test results, real time data review.
Data storage	Data storage on Android devices is typically in Gigabyte range, meaning essentially unlimited storage space is available.

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