

GEOTECTION TECHNICAL SPECIFICATIONS:

Measurement modes	Apparent resistivity, resistance, self potential, contact resistance, transmitter current and voltage, receiver voltage, weather (in/out temp, rain, wind, humidity)
Measurement range (input voltage)	+/- 10V.
Measurement resolution	16-bit (15 microvolts per +/- 10 volt range)
Recording resolution	6 digits
Output current intensity	1mA - 8000 mA continuous
Output voltage	120 volts (optional 240 volt upgrade)
Input channels	180 base simultaneous receiver channels (not multiplexed)
Multiplexor	Expandable multiplexing in groups of 180 sensors
Input gain ranging	Automatic or Manual
Input impedance	>10 MOhm.
Frequency	0.05 to 5 Hz
Duty Cycle	10 to 90 percent
Sampling Window	Operator adjustable
Filters (Noise suppression)	Analog (hardware) 10 Hz low pass or 1 kHz low pass Digital (software) user adjustable
Fault / Alarm Detection	Detects AC power fail, user selected disconnect (override), open circuit (wire) detection,
Serviceability	Modular design can be serviced with single Philips head screwdriver
Safety	Emergency stop in and outside, manual lockout to support lock-out & tag-out protocols
Error analysis	Point-to-Point error and Pulse-to-Pulse error
Powerline noise suppression	50 and 60 Hz (see filters)
Total accuracy	< 0.2% hardware and << 0.25% with software calibration on NIST traceable calibration test box.
System calibration	Externally calibrated using NIST traceable calibration box or upgradeable to internal calibration modules
Operating system	Windows XP, Vista, 7
Data storage	Redundant enterprise grade laptop hard drives SQL Database storage ASCII CSV summary files Binary full waveform files
Data display	Numeric and graphical, full waveform
Memory capacity	Limited to hard drive size

Data transmission	USB, Network (LAN), Internet, 2-way Satellite
Quality Assurance	NQA-1 2004
Electrical Safety	UL/NEC compliant
Housing	System housed in portable trailer equipped with climate controls, uninterruptable power supply, weather monitoring, satellite communications
Display	22" and 37" 1080p displays
Input Power	240V 50Amp
Operating temperature	Climate controlled trailer