

## GTEM Data Sheet

The Geonics G-TEM is a complete TEM system offering advanced quality control and analysis features to assist operators obtain reliable near surface resistivity soundings. Designed to be portable and simple to operate, the G-TEM offers an intuitive user interface and menu for implementing central loop soundings, moving receiver and Slingram records.



*The bottom of the case holds the recording electronics and data acquisition interface, whilst the lid contains a TEM47 transmitter.*

As standard the G-TEM is supplied with a TEM47 transmitter- suitable for prospection to up to 150m- which is built into the lid of modular briefcase style housing. In instances where large central loop sounding are undertaken the Transmitter (lid) and Receiver (bottom) can be separated and a custom length reference cable employed. The G-TEM receiver is compatible with all TEM transmitters and Receiver coils supplied by Geonics; equally the G-TEM transmitter can be used with the PROTEM.

Through incorporating a Laptop PC into the G-TEM receiver operators can perform all functions on the instrument itself including full infield inversions of sounding curves. Built-in test routines aids validate system setup and noise levels before acquiring data.

The G-TEM data acquisition software centres on a graphical sounding display and geometry window, survey parameters and time gate amplitudes flank the screen.

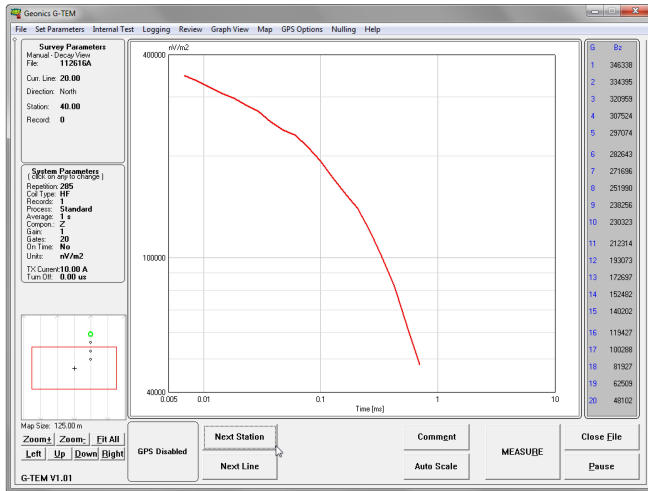
### Product Dimensions

Physical	Dimensions (L x W x H)	Weight
(instrument only)	40cm x 32cm x 18cm	13kg

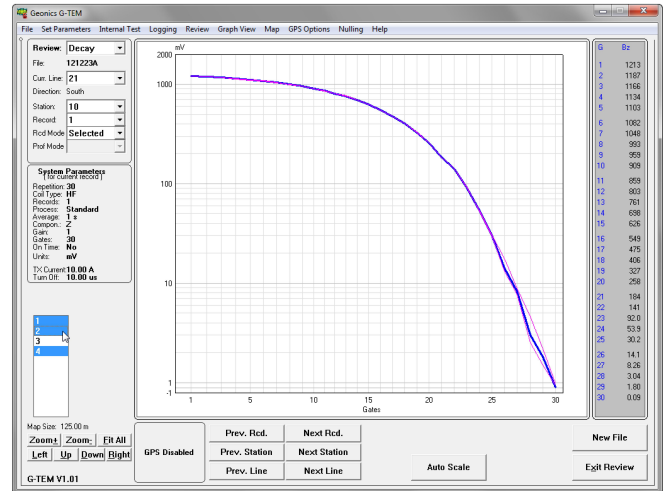
## Technical Specifications

<b>Display:</b>	10 inch colour touchscreen LCD.
<b>Measurement Quantities:</b>	Rate of decay of magnetic field, in nV/m <sup>2</sup> .
<b>Channels:</b>	1 Channel.
<b>Time Gates:</b>	20 gates covering 2 time decades 30 gates covering 3 time decades, or User-programmable
<b>Dynamic Range:</b>	16 bits minimum.
<b>Base Frequency:</b>	0.3, 0.75, 3, 7.5, 30, 75 and 285 Hz, or 0.25, 0.625, 2.5, 6.25, 25, 62.5 and 237.5 Hz.
<b>Integration Time:</b>	0.5, 1, 2, 4, 8, 15, 30, 60 or 120 s.
<b>Data Storage:</b>	320 GB internal hard drive; memory stick compatible.
<b>I/O Ports:</b>	RS-232, USB and RJ45.
<b>Synchronization:</b>	Reference cable.
<b>Power Source:</b>	-15V rechargeable lithium battery.
<b>Number of Records Per Station:</b>	1, 2, 5, 10, 30, continuous
<b>Current Waveform:</b>	Bipolar rectangular current with 50% duty cycle.
<b>Base Frequency:</b>	30, 75, or 285 Hz (power line frequency 60 Hz) 25, 62.5 or 237.5 Hz (power line frequency 50 Hz)
<b>Turn-Off Time:</b>	2.5 ?s at 3A into 40 x 40 m loop; faster into smaller loop.
<b>Transmitter Loop:</b>	1 x 1 to 100 x 100 m single turn loop, or 5 x 5 m 8-turn loop.
<b>Output Voltage:</b>	0 to 9 V, continuously adjustable, with internal 15 V battery.
<b>Output Current:</b>	3.5A with internal 15 V battery.
<b>Power Source:</b>	Internal 15 V rechargeable lithium battery; optionally, up to four external 12 V batteries.
<b>Battery Life:</b>	8h continuous operation at 2A output.

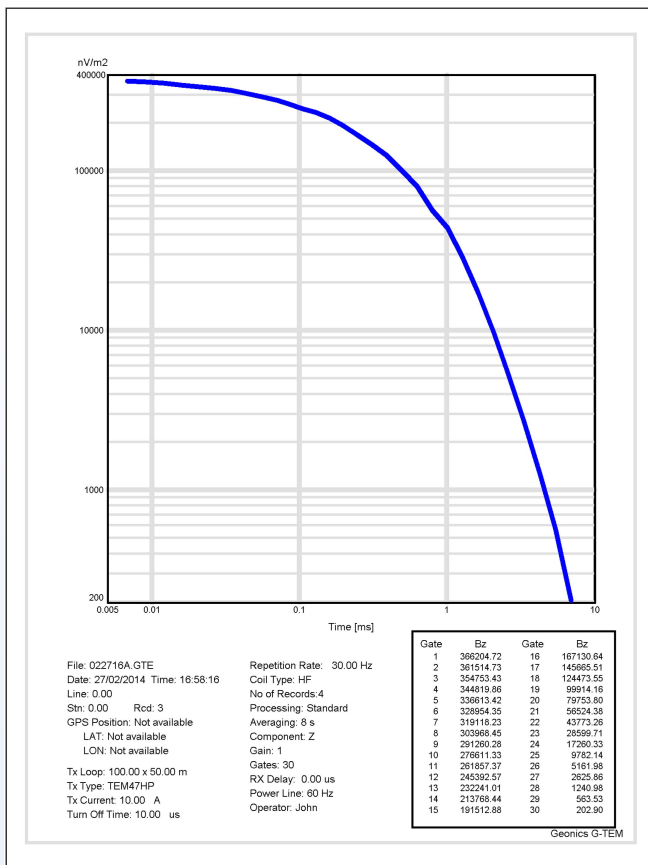
## Gallery



GTEM Sounding display



GTEM Sounding review



GTEM Sounding Summary print