



Geoscanners AB®

# GPRSIM.NET GPR TRACE SIMULATION SOFTWARE

**GPRSim.net**  
File View Help

Siemens/m.  tanδ

Amount of layers: 4 Samples: 1024 Frequency (MHz): 750

	k	Siem/m.	Thickness(m)
AIR			
1	3	0.01	0.15
2	6	0.001	0.25
3	3	0.000001	1.5
4	4	0.1	100
5	6	0.093	0.3
6	80	3	0.3
7	3	0.0001	0.3
8	3	0.0001	0.3
9	5	0.0001	0.3
10	5	0.0001	0.3

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Frequency Spectrum Plot (MHz):  
Y-axis: 0 to 1  
X-axis: 0 to 5030.3 MHz (ticks at 1257.6, 2515.1, 3772.7, 5030.3)

Time-Domain Trace Plot (nS):  
Y-axis: -1 to 1  
X-axis: 0 to 98.60 nS (ticks at 0, 24.65, 49.30, 73.95, 98.60)

Buttons: Simulate, Exit

Time view 1:1

## **GPRSIM.NET**

GPRSim.net is a basic time domain simulation tool. It is partially based in the transmission line model and allows up to ten layers to be simulated with frequencies ranging from 200 to 2000 Mhz.

It can be used to try out different real world survey scenarios and understand how different center frequency antennas could perform, as well as getting an idea of how the A-scan (single trace) might look like in the given conditions.

All the layers are defined using only three parameters: relative dielectric constant or permittivity (epsilon), electric conductivity (sigma) and the physical thickness of the layer. It is possible to enter the value of the loss tangent instead of the conductivity (sigma). The model assumes the relative permeability to be equal to one.

The simulations results are displayed in the time in frequency domain and it is possible to print out the time domain plot.

GPRSim.net allows different survey scenarios to be stored as CSV files. This provides the user with an effective and fast way of sharing and recalling simulations.

There's no need to register GPRSim.net for commercial or non-commercial purposes , but we would appreciate very much if you could share with us your opinion regarding the software. Besides, if you register then we can keep you posted on new versions and other geophysical freeware too.

At Geoscanners AB we highly appreciate all kind of comments, suggestions, bug reports etc. that you as the end customer could share with us. Please use the e-mail address from this document to get in contact with us. Do not forget to write the word GPRSim.net in the subject of the mail, otherwise there's a risk of the mail being discarded or missed.

E-mail: [support@geoscanners.com](mailto:support@geoscanners.com)

Download you version today, it's free!

[www.geoscanners.com](http://www.geoscanners.com)

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