



Geoscanners AB®



VHT501

The VHT501 high power plug in transmitter is the most affordable and highest quality available device for deep penetration geophysical surveys using ground penetrating radar. It was designed to fit in antennas compatible with GSSI SIR® ground penetrating radar systems.

The VHT501 offers an excellent performance in terms of clean and sharp pulses delivered to the antenna terminals. An added bonus is that little energy is wasted and almost all the available power is delivered to the antenna without losses. That fact alone makes possible its use together with the SIR3000 without the need for supporting units up to 12 kHz.

ELECTRICAL SPECIFICATIONS:

Average Power Consumption at 12 kHz PRF	0.831 W
Average Power Consumption at 50 kHz PRF	2.925 W
TX Impulse Peak Voltage	+/- 600 V
TX Impulse Rise Time	2.25 ns
TX Impulse Fall Time	1.78 ns
TX Impulse FWHM	4.28 ns
Phase balance	2.45°

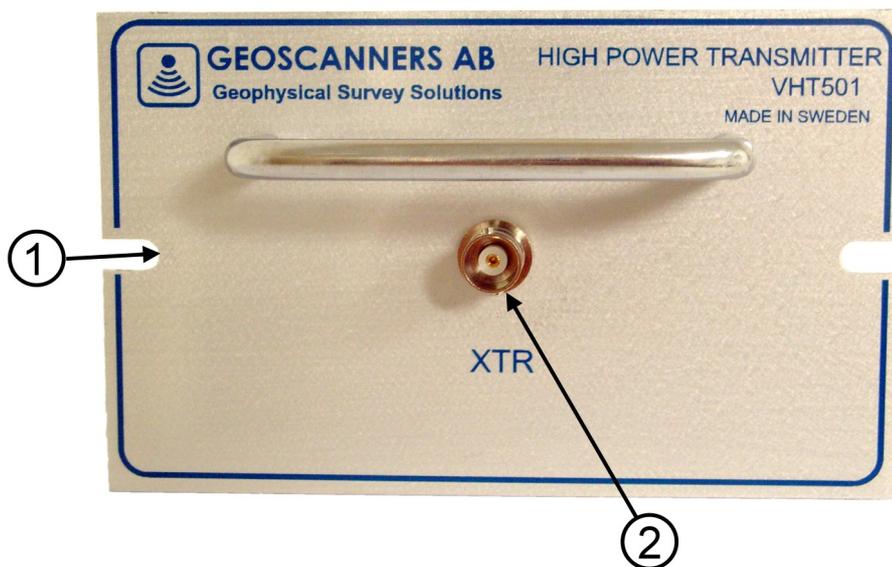
Note 1: All values except average power consumption are measured at 50 kHz PRF with a 300 Ohms load and no averaging.

MECHANICAL SPECIFICATIONS:

Dimensions (LxWxH) mm/inch	230x133x82 (mm)/ 9.0x5.2x3.2 (inch)
Weight Kg/Lbs	0.3 kg/ 0.66 Lbs
Ingress Protection Rating	IP51

ENVIRONMENTAL SPECIFICATIONS:

Maximum Temperature °C / °F	+40 °C / +104 °F
Minimum Temperature °C / °F	-10 °C/ +14 °F
Maximum Humidity (non-condensing)	96% RH
RoHS Compliant	YES



OPERATING INSTRUCTIONS:

1. Insert the plug in electronics VHT501 into the antenna slot. Pay attention that the letters on the antenna and on the VHT501 must be facing the same direction.
2. Secure with two bolts the plug in electronics inserting them through the slots (1) and fastening them to the threads in the antenna case.
3. Attach the coaxial cable coming from the output "EXT" from the plug in electronics TR501 to the BNC input "XTR" (2) on the VHT501.
4. Make sure that the high power transmitter and the unit driving it are firmly

attached to the antennas before starting the units operation or powering them from the radar unit.

5. If PRF exceeding 12 kHz are desired in order to speed up the survey, then one must use the supporting unit PRFPLUS-600 available from Geoscanners AB.

Turn on the radar and proceed with the survey.

TERMS OF USE:

Geoscanners AB has made all reasonable efforts to ensure that all information provided through this document is accurate at the time of inclusion; however, there may be inadvertent and occasional errors for which Geoscanners AB apologizes.

Geoscanners AB accepts no liability for any inaccuracies or omissions in this document and any decisions based on information contained in this document are the sole responsibility of the reader. Geoscanners AB accepts no liability for any direct, special, indirect, or consequential damages, or any other damages of whatsoever kind, resulting from whatever cause through the use of any information obtained either directly or indirectly from this document.

This document may not be copied, reproduced, re-published, downloaded, posted, broadcast or transmitted in any way except for your own personal use. Any other use requires the prior written permission of Geoscanners AB. You agree not to adapt, alter or create a derivative work from any of the material contained in this document or use it for any other purpose other than for your personal use. You agree to use this document only for lawful purposes, and in a manner which does not infringe the rights of, or restrict or inhibit the use and enjoyment of this document by any third party.

This document and the information, names, images, pictures, logos and icons regarding or relating to Geoscanners AB, its products and services (or to third party products and services), is provided "AS IS" and on an "IS AVAILABLE" basis without any representation or endorsement made and without warranty of any kind whether express or implied, including but not limited to the implied warranties of satisfactory quality, fitness for a particular purpose, non-infringement, compatibility, security and accuracy.

In no event will Geoscanners AB be liable for any damages including, without limitation, indirect or consequential damages, or any damages whatsoever arising from use or loss of use, data, or profits, whether in action of contract, negligence or other tortious action, arising out of or in connection with the use of this document. Geoscanners AB does not warrant that the functions contained in the material contained in this document will be uninterrupted or error free, that defects will be corrected. The names, images and logos identifying Geoscanners AB and their products and services are proprietary marks of Geoscanners AB. Nothing contained herein shall be construed as conferring by implication or otherwise any license or right under any trade mark or patent of Geoscanners AB, or any other third party.

If there is any conflict between these Terms and Conditions and rules and/or specific terms of use appearing in this document relating to specific material then the latter shall prevail.

If any of these Terms and Conditions should be determined to be illegal, invalid or otherwise unenforceable by reason of the laws of any state or country in which these Terms and Conditions are intended to be effective, then to the extent and within the jurisdiction which that Term or Condition is illegal, invalid or unenforceable, it shall be severed and deleted from this clause and the remaining terms and conditions shall survive, remain in full force and effect and continue to be binding and enforceable.

These Terms and Conditions shall be governed by and construed in accordance with the laws of Sweden. Disputes arising here from shall be exclusively subject to the jurisdiction of the courts of Sweden.

If these Terms and Conditions are not accepted in full, the use of this document must be terminated immediately.