

ANTENNA EQUIPMENT CHARACTERISTICS

1. Nomenclature / Model No. Antenna Model B1231	1a. Manufacturer's Name 3d-Radar AS Vestre Rosten 81, NO-7491 Tiller, Norway
2. System Nomenclature GeoScope GPR	3. Type Bowtie monopole transmit/receive array (31 elements)
4. Frequency Range 300 MHz – 2.0 GHz	5. Polarization Horizontal
6. Gain (a) Main Beam <u>-5 dBi</u> (b) Side Lobe <u>-25 dBi</u>	7. Scan Characteristics (a) Type <u>Electronically sequencing between elements</u> (b) Vertical Scan No (1) Max. Elev. <u>N/A</u> (2) Min. Elev. <u>N/A</u> (3) Scan Rate (c) Horizontal Scan (1) Sector Scanning <u>N/A</u> (2) Scan Rate <u>10 – 160 Hz</u>
8. Beamwidth (a) Horizontal <u>70 degrees (downwards looking)</u> (b) Vertical <u>70 degrees (downwards looking)</u>	

9. Remarks

The antenna Model B1231 is a wideband linear antenna array for ground penetrating radar containing 31 antenna pairs with element separation of 3.75 cm. The antenna array is located very close to the ground (5 – 10 cm elevation), and the main radiation is directed towards the ground. The array is scanned electronically by connecting the transmitter and receiver sequentially to each of the 31 antenna pairs.