

ANTENNA EQUIPMENT CHARACTERISTICS

1. Nomenclature / Model No. Antenna Model B2431	1a. Manufacturer's Name 3d-Radar AS Vestre Rosten 81, NO-7075 Tiller, Norway
2. System Nomenclature GeoScope GPR	3. Type Bowtie monopole transmit/receive array (31 elements)
4. Frequency Range 100 MHz – 1.5 GHz	5. Polarization Horizontal
6. Gain (a) Main Beam <u>-5 dBi (oriented downwards into ground)</u> (b) Side Lobe <u>-25 dBi</u>	7. Scan Characteristics (a) Type <u>Electronically sequencing between elements</u> (b) Vertical Scan <u>No</u> (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 B2431 is a wideband linear antenna array for ground penetrating radar containing 31 antenna pairs with element separation of 7.5 cm. The length of the antenna array is 240 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.