

## Description

The HBD-350 is a UWB UHF GPR-antenna. This antenna can be used not only as a ground-coupled, but also in airborne and air-coupled applications. The HBD-350 is top shielded and perfectly suited for snow thickness measurements from helicopters. This antenna offers good penetration, bandwidth, resolution and extremely low ringing. This antenna is fully compatible with GSSI data acquisition systems: SIR-10, SIR-2, SIR-2000, SIR-20 and SIR-3000.

## Applications

- Air-coupled road and railway surveys
- Structure mapping of base and sub-base layers
- Airborne snow measurements



## Technical Data

Electrical	
Type of device	Hemispherical butterfly dipole
Peak frequency <sup>1</sup>	342 MHz
Center frequency (BW <sub>10dB</sub> ) <sup>1</sup>	334 MHz
10 dB bandwidth <sup>1</sup>	80.8 %
Distance between the TX/RX terminals	345 mm
Voltage applied to antenna terminals	100 V
E-field to H-field ratio <sup>2,3</sup>	3.34 dB
Front to back ratio <sup>1</sup>	-14.50 dB
Gain	N/A
Connector type	SOURIAU 85102E1811P50
Environmental	
Operating temperature	-30°C to 70°C (-22F to 158F)
Operating humidity (non condensing)	96% RH
Ingress protection	IP54
Mechanical	
Dimension (L x W x H)	740 x 405 x 225 mm (29.13 x 15.94 x 8.85 inch.)
Weight	6 kg (13.22 pounds)
Material	ABS plastic, UV resistant up to 10 years

Notes: <sup>1</sup>Dielectric constant = 4. <sup>2</sup>The H-field is parallel and the E-field is perpendicular to the long axis of the antenna. <sup>3</sup>Dielectric constant = 1

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