



## Field Archaeology & Cultural Heritage

**Examine, map and evaluate infrastructure and sub-surface assets**

- ✓ Non-destructive and non-intrusive
- ✓ Fast and efficient scanning of large areas
- ✓ Proven technology delivers the best sub-surface imagery



## Why GPR?

Ground-penetrating radar (GPR) presents you with a way to non-destructively and non-intrusively image infrastructure such as bridge decks, rail lines, roads, and runways, as well as sub-surface assets, such as utility networks. Of all the geophysical technologies you can have in your toolbox, GPR is generally accepted as the easiest to deploy with the best data resolution.

Using GPR allows you to preserve your site and the features and objects of interest below, enabling you to assess correctly, mark up, and document critical information to aid in decision making and to report.

## Application areas

- Bridge deck inspection
- Pavement/ road assessment
- Railway investigations
- Sinkhole detection
- Utility mapping

## Why Raptor?

Raptor is a multi-channel 3D GPR array solution that will help you achieve maximum productivity and optimum results. The unique design allows antennas to be configured quickly, easily and expanded as needed. In addition, the density of collected data means that a single pass is all that is necessary to obtain high-quality 3D information of the line surveyed. Combined with the synchronization of accurate positional data, each survey line, or 'swath', can be precisely aligned to adjacent swaths. This approach optimizes the data gathering process across large areas for efficient subsurface mapping for various applications.

## Key Features

- High-speed 3D imaging at posted speed limits
- Rapid set up and easy deployment
- Seamless integration of RTK GPS or Total Station
- Easy mapping via graphical navigation display
- Fast swap between pushcart and vehicle-mount

## Raptor Carrier solutions

### Easy change set up kit



*\*Raptor-17 antennas can be configured similarly to the other Raptor variants; however, they do not fit the standard carrier options due to their physical size. Therefore, you will need to provide a carrier solution to meet your specific needs.*

## Software

Raptor is controlled via Talon, a proprietary Windows-based acquisition software program specifically designed for the configuration and control of Raptor antennas. Data processing, visualization, and interpretation is managed via Condor, our 3D GPR processing software – refer to Condor brochure.

## Technical specification

	Raptor-80	Raptor-45	Raptor-17
Antenna Centre Frequency	800 MHz	450 MHz	170 MHz
Antenna Footprint	110 x 150 mm	165 x 230 mm	450 x 220 mm
Antenna Weight	1 kg	2 kg	4,3 kg
Number of channels – pushcart / vehicle-mount	12 / 28	8 / 18	User defined*

*ImpulseRadar products are under continuous development and we reserve the right to change specifications at any time and without prior notice. You may verify product specifications at any time by contacting our headquarters via our website.*

