



Terrestrial Ground Penetrating Radar Cart (GPR)

Components of the system



1. Light, compact, shockproof trolley made of durable plastic, designed for surveys on asphalt/concrete or other hard surfaces.
2. Built-in magnetic encoder/odometer with 1000 ppr (pulses per revolution).
3. 5/8" thread male mounting adapter for GPS receiver. The GNSS receiver in the photos is for demonstration purposes only and must be ordered separately.
4. Weighing approximately 12 kilograms.
5. Compatible with GPR systems:
 - a. Zond Aero [500/1000](#)

Application scenarios

- A. Evaluating roadbed conditions before resurfacing
- B. Identifying subsurface cracks, voids, and delamination.
- C. Monitoring pavement deterioration and thickness analysis.
- D. Identifying ancient roads and settlement layouts.
- E. Evaluating ballast and trackbed conditions in Railway and Airport Infrastructure Inspections
- F. Detecting weaknesses in concrete slabs and foundations.
- G. Assessing structural integrity before renovations.

Capabilities of the system

Standard GPR surveys can be performed either using a handheld GPR, by pushing the GPR on a cart, or by mounting it behind a vehicle. A GPR cart is ideal for situations where manual ground-based scanning is needed due to terrain constraints, precise data collection needs, or accessibility limitations (e.g., urban settings, rough terrains, or historical sites). Unlike drone-mounted GPR, a cart ensures continuous ground contact, leading to higher resolution and more accurate subsurface imaging.

[See the GPR Cart in action](#)