

# KERBEROS™

  
Coded**RADAR**



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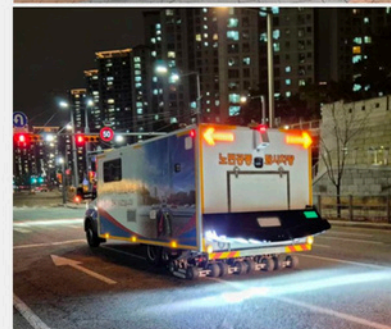
## **SURFACE + SUBSURFACE IMAGING PLATFORM**

Unleash your understanding of the world below with Kerberos™, a next-generation 3D ground penetrating radar (GPR), surface imaging and sensor measurement platform from CodedRADAR.

Combining patented ultra-rapid 3D Noise-Modulated GPR (NM-GPR), continuous surface imaging, RTK-GNSS positioning and other optional sensors, Kerberos™ images above & below ground features within normal traffic flows at up to 60 MPH.

The tough & modular ground-coupled subsurface imaging array can be vehicle or trailer mounted for rapid scanning of roads, airports & other large paved areas. Integrated deployment and suspension systems enable the array to be lowered remotely, for maximum safety, and flex with surface undulations, for consistent data quality.

Onboard collection software enables detailed monitoring of gathered data, ensuring the equipment is working and the site has been fully covered. Numerous 3D NM-GPR and surface imagery scans can then be combined & viewed in Terraverse™ software, enabling holistic and detailed analysis of large and complex sites.



Trailer & vehicle  
installation examples

[www.codedradar.com](http://www.codedradar.com)



**NM-GPR: A patented GPR technology using coded-signal transmissions & multiple ultra-rapid samplers for superior 3D performance without compromising collection speed, measurement density or data quality.**

| Attribute            | Details   |
|----------------------|---|
| GPR control unit:    | NM-GPR V2.1 (4 Tx + 8 Rx)   |
| No. GPR channels:    | 22 (3 pod system, ~2.4m / 8ft wide)<br>30 (4 pod system, ~1.8m / 6ft wide)  |
| Ant. freq. range:    | 386 MHz—2.078GHz (~1.2 GHz center)  |
| Penetration depth:   | Up to 3.0m / 10ft (material dependent)  |
| Operating speed:     | Posted speed limit (max 100km/hr or 62MPH)  |
| Dimensions: (array)  | Width: 2.43m [8ft](4-pods) or 1.82m [6ft] (3-pods)<br>Length 1.07m [3.5ft]; Stowed height: 0.34m [1.1ft]  |
| Weight:              | Approx. 500kg [1100lbs]; 730kg [1600lbs] incl. trailer  |
| Positioning:         | Rotary encoder & RTK-GNSS; IMU (optional)   |
| IP Rating:           | System: IP53. Antenna pods: IP65.   |
| Standard inclusions: | NM-GPR V2.1 digitizer; i7 Desktop PC + peripherals; Power & synchronization subsystem; mechanical deployment frames with ground-coupled antenna pods; electrical lift system; all necessary cables; RTK-GPS & antennas; <i>EarthControl</i> software (data collection monitoring, playback & basic analysis). |
| Optional extras:     | TerraVerse™ advanced viewing & analysis software; surface imagery camera; lighting arrays; ROW cameras; transverse laser profiling (rutting); roughness/ texture lasers; IMU; LiDAR.  |

- World's fastest 3D GPR technology, using patented real-time sampling technique.
- Image to ~10 ft deep on 30 GPR channels with 1" spacing at 60MPH (site conditions permitting).
- Collect high-resolution surface imagery & directly compare with 3D GPR to aid interpretations.
- Ground-coupled antennas for superior data quality, penetration & avoiding above-ground targets.
- Adaptive stacking maximizes GPR imaging performance regardless of driving speed.
- Combine & analyze gathered data covering large, complex sites using TerraVerse™.
- Gather 3D and multi-offset data for additional calibration options.
- Scalable hardware with various vehicle & trailer install options.
- Deploy antennas without leaving vehicle, for maximum safety.
- Durable, replaceable skid plates.
- Various optional surface measurement sensors.