



Earth Science Systems

ESSENTIAL UNDERGROUND INFORMATION

Asphalt Pavement Scanner

Compaction - Density - Temperature - Roughness

The **Asphalt Pavement Scanner** uses radar and infrared sensors to measure compaction, and density without nuclear sources. Produce maps of compaction, density, temperature, and roughness that indicate quality and uniformity. Use for acceptance and risk reduction.



The **Asphalt Pavement Scanner** measures the pavement's dielectric constant using advanced radar technology. Compaction and density are calculated from the dielectric constant using a specific calibration for each asphalt mix (similar to a Rice value calibration). The radar sensor and IR temperature sensor continuously scan the surface to produce dielectric, density, compaction, temperature, and roughness maps.

Maps of compaction, temperature, and roughness provide a measure of uniformity that cannot be obtained from spot measurements with traditional density gauges. These maps provide better Q/A and Q/C, and ultimately reduced risk and cost.

Costs and risks with associated nuclear sources are eliminated. No more nuclear safety training classes. No more source licensing headaches.

Pavement Scanner

Real-time, Continuous, Pavement Density and Temperature Measurement

Advanced Software

Creates dielectric, compaction, density, temperature, and roughness maps, as well as density histograms.

Rich Reporting

Create Microsoft Word, PDF and image output with overlays on Google Maps satellite imagery.

Calibration Kit (optional)

Measure dielectric constant of gyratory compactor pucks to obtain precise density/compaction calibration (similar to Rice value).

Gauge Mode

Combine the scan head with the coupling cone (part of calibration kit) to operate. the unit in hand held gauge mode.



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Easy Setup with No Cables

No cables to get frayed, and no damaged or dirty connectors to replace. Eliminates intermittent connections. Disassembles into three pieces for easy storage.

Easy Charging

The shipping case's integrated charger charges all system components simultaneously.

Specifications

- 2 GHz bi-static radar antenna
- Non-contacting IR temperature sensor
- Rugged Dell tablet computer
- Wifi for completely cable-less operation
- Durable IP65 ingress protection
- AASHTO PP 98-19 compliant
- Localization from odometer and GPS
- Optional RTK GPS base station
- Calibrate using compactor pucks or cores
- Rechargeable LiFePO4 battery provides up to 6 hours continuous operation
- Two batteries with dual charger for all day use
- Shipping dimensions:
36 x 28 x 20 inches (91.4 x 71.1 x 50.8 cm)
99 lbs. (45 kg)

