

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, roughness, and thickness 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. The radar sensor and IR temperature sensor continuously scan the surface to measure dielectric, density, compaction, temperature, roughness, and thickness.

With the high-accuracy internal GPS, users can create maps of compaction, temperature, roughness, and thickness to provide a measure of uniformity that cannot be obtained from density gauges. These maps provide better Q/A and Q/C, and ultimately reduced risk and cost.

With Asphalt Pavement Scanner, the costs and risks with associated nuclear sources are eliminated. No more nuclear safety training classes. No more source licensing headaches.

Earth Science Systems, LLC – 11485 W. I-70 Frontage Rd. – Wheat Ridge, CO – USA www.earthsciencesystems.com – Tel: 303-800-2000

# **Pavement Scanner**

Real-time, Continuous, Pavement Density and Temperature Measurement



#### Advanced Reporting Software

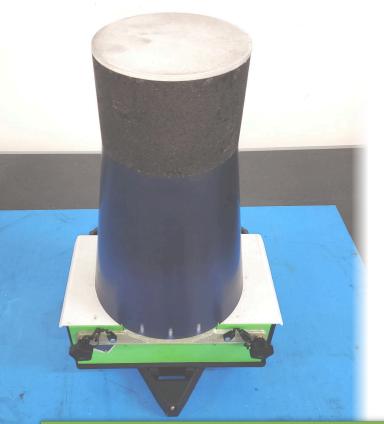
Create maps of dielectric, compaction, density, temperature, roughness, and thickness. Create PDF reports and map overlays on Google Maps satellite imagery. Export data to industry standard VETA software. Generate histograms and pass/fail statistics.

## Calibration Kit (optional)

Measure dielectric constant of gyratory compactor pucks to obtain precise density/compaction calibration.

## Vehicle Mounted Outrigger

The outrigger frame can carry 1-3 scan heads and mounts to a survey vehicle trailor hitch. Each scan head has an independent computer controlled height adjustment.





## Easy Setup with No Cables

No cables to get frayed, and no damaged or dirty connectors to replace. Eliminates intermittent connections. Easy disassembly for easy storage and shipping.

#### Easy Charging

Multi-bay charger charges all system batteries simultaneously.

#### Specifications

- 2 GHz bi-static radar antenna
- Non-contacting IR temperature sensor
- Ruggend Dell tablet computer
- Wifi for completely cable-less operation
- Durable IP65 ingress protection
- AASHTO PP 98-19 compliant
- Precision built-in GPS.
- Optional RTK GPS base station
- Mix calibration using compactor pucks or cores
- Rechargeable Li-lon batteries provides up to 6 hours continous operation
- Vehicle mouted outrigger for 1-3 scan heads
- Two shipping cases: 64x20x20" (162.3x50.8x50.8 cm), 130 lbs. (45 kg) 32x20x20" (81.3x50.8x50.8 cm), 60 lbs. (27 kg)

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