Precise Surface Profile Measurement at Highway Speeds

DOT Compliant QA/QC Testing on All Pavement Types

Meets ASTM/AASHTO Standards ✚ Easy Collection & Analysis Software ✚ Productive & Reliable (=Quick ROI)
## Profiling System Specifications

- Collect data up to 70 mph (112 kph)
- Meets E950, AASHTO M328, R054, R056-057
- Meets or exceeds all Class I requirements of ASTM E950.
- **Zero-Speed Option:** collect certifiable data through vehicle stoppages and at **ANY** speed: 0-100 mph.
- Features 5 kHz Gocator wide beam lasers: best for textured asphalt and concrete pavements.
- ±10g rated Accelerometers with 0.0001g accuracy.
- Proven ability to replicate wavelengths of ~0.25 feet (7.62mm) in excess of 760 feet (231.6 meters).
- Collection system removable for use on other vehicles.

### Compliance and Equipment

- Complies with all commonly used agency specifications.
- Equipped with industrial grade sensors and connectors.
- Core electronics manufactured in an ISO 9001 facility.

### TOUGHBOOK

- Rugged computer on all systems.
- Custom docking station mount for comfort and access.
- All systems run off of a 12 volt power supply.

### Operation, Training & Support

- One person operation. All in cab operation.
- Speed range: 1 inch sampling for all speeds (5-65 mph)
- Operating ambient temperature range: 32° to 110° F
- Moisture: profiling system components impervious to moisture (but quality of data degrades on wet pavement).
- Worldwide multi-lingual operator training available.

- Automatic software updates with SSI Profiler 3
- In field replacement of portable, modular components.

### Warranty and rapid response customer support

- On all profiling system hardware and software components.

### Options:

- GPS-DMI, survey GPS with CAD output, HD camera, rut measurement, printer and more.

## Best-In-Class Profiling System Software

- Windows 7/10 Professional software programs.
- Easy calibration instructions for bounce test, laser verification, accelerometer and distance calibrations.
- On screen visual aids and fast reporting of profile results.
- Support for Google Earth, Google Maps and Microsoft MapPoint.
- Navigate to locations within profile data using real time GPS Tracker and navigational/mapping capabilities.
- User selectable parameters for English and Metric units.
- Real time data display of profile trace.
- Electric Eye data triggers on each side of system function at 30+ feet (10+ meters).
- User programmable keyboard shortcuts
- SSI “Continuous Collection” software suspends collection below 5 mph and resumes when speed exceeds 5 mph.
- Pause areas integrated into collection. View paused areas separately or exclude.

### Multiple Profile Indexes:

- **IRI** (International Roughness Index, Mean IRI (MRI), Half Car Ride Index (HRI), Profile Ride Index (PRI), ASTM E1274), Ride Number (RN).
- Multiple outputs for **Areas of Localized Roughness**: IRI based roughness with configurable thresholds; Rolling Straightedge, Profilograph must-grind bumps, Texas 1001-S localized roughness, Boeing Bump reporting.
- Raw data is rewritable: change parameters at any time.
- User defined filtering values for high and low pass filters.
- Patented multiple trace reporting capability.

- Export data into [PROVAL](ppf, erd, pdf, Excel, CSV, PRO, CAD, Survey, and Text)
- Data is encrypted for security.

![Computer Instructed Calibration and Data Collection Routines](image1)

![Gocator Wide Footprint Laser](image2)

![In-Cab Touchscreen Computer](image3)

**Surface Systems & Instruments, Inc.**

**California Division**
1845 Industrial Drive, Auburn, California 95603
Tel: (415) 383-0570 • Fax: (415) 358-4340
smoothroad.com

**Kansas Division**
307 Plymate, Manhattan, Kansas 66502
Tel: (785) 539-6305 • Fax: (785) 539-6210
info@smoothroad.com

![QR Code](qr-code)