Inertial Profiler

▲ CS9300 Portable Front Mount System▲

▲ CS9100 Mid-Mount System▲

▲ CS9400 Simple Profiler▲

▲ CS8700 Lightweight Profiler▲

▲ CS9200 Trailer Profiler▲

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)
## CS9300 / CS9100 High Speed Profiling Systems

### Profiling System Specifications

- Collect data up to 65 mph (105 kph)
- Meets E950, AASHTO M328, R054, R056-057
- Meets or exceeds all Class I requirements of ASTM E950.
- 1 inch sampling interval at all collection speeds.
- Features LMI Technologies’ new 5 kHz Gocator wide beam lasers for asphalt and concrete pavements.
- ±5g 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).
- All sensors and electronics removable for reuse on any SSI profiling system.

### 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 v2014
- In field replacement of portable, modular components.

### Warranty and Options

- Warranty and rapid response customer support on all profiling system components and operations.
- Options: high resolution GPS (RTK corrected) with CAD output, HD camera, rut measurement, printer and more.

### Best-In-Class Profiling System Software

- Windows 7/8 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), Ride Number (RN)).
- Multiple outputs for Areas of Localized Roughness: IRI based roughness based on user specified thresholds; Rolling Straightedge, Profilograph must-grind bump template, Texas 1001-S localized roughness, 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 (PPF, ERD, PDF, Excel, CSV, PRO, CAD, Survey, GIS, and Text)
- Data is encrypted for security.

---

[Surface Systems & Instruments, Inc.](http://smoothroad.com)

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

**Kansas Division**
307 Plymate, Manhattan, Kansas 66502
Tel: (785) 539-6305 • Facsimile: (415) 358-4340
info@smoothroad.com