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**SURFACE SYSTEMS & INSTRUMENTS, INC.**

[smoothroad.com](http://smoothroad.com)

• Custom Test Equipment • Mobile Technology Solutions • FF/FL • Road Profilers • Panasonic Toughbooks

## CS1100 GPS-DMI Distance Measurement Systems



▲ Simple Touchscreen Operation ▲ Multiple Settings and Units ▲

### GPS Based Precision Distance Measurement

Feature	CS1100 (Basic)	CS1125 (Advanced)*	CS1150 (Pro)+
10Hz, 0.7m GPS with Corrections	✓	✓	✓
External Mag Antenna	✓	✓	✓
Vehicle 12V Power Supply	✓	✓	✓
5" Touchscreen	✓	✓	
Vehicle OBD-II Integration		✓	✓
Profiler Wheel Encoder Replacement		✓	✓
Photo Electric Eye Triggering		✓	✓
Enhanced Low Speed Accuracy		✓	✓
Connects to Phone/Tablet/Computer			✓

\*Estimated Q1 2024

+ Coming Soon

Hardware	Software
<ul style="list-style-type: none"> <li>• 5" touchscreen models for easy, safe operation.</li> <li>• Host vehicle power supply               <ul style="list-style-type: none"> <li>• Optional DC battery configuration for out of vehicle use</li> </ul> </li> <li>• 10Hz GPS with satellite corrections.               <ul style="list-style-type: none"> <li>• GNSS, Glonass, Beidou, Galileo (35+ satellites)</li> </ul> </li> <li>• Accurate to within 0.05%</li> <li>• Repeatable measurements to within 3 foot/mile</li> <li>• Vehicle OBD-II interface compensates when GPS lost (Advanced Model)</li> <li>• Quickly installed or moved between vehicles</li> <li>• Rugged container for shipping and storage</li> </ul>	<ul style="list-style-type: none"> <li>• <b>NO CALIBRATION REQUIRED</b></li> <li>• Current speed output</li> <li>• Powered on and receiving satellites in minutes</li> <li>• Simple to operate (stop, start, pause, input station)</li> <li>• Large touchscreen icons</li> <li>• OBD model self-calibrates incoming OBD pulses</li> <li>• Measure reported in English or Metric units</li> <li>• View GPS details and real time GPS coordinates</li> <li>• Connect to inertial profiler or other equipment               <ul style="list-style-type: none"> <li>• Replaces encoder hardware for some inertial profiler applications.</li> </ul> </li> </ul>



▲ Multiple Power & Signal Connections ▲

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