

# roadprofilers

The International Cybernetics Corporation MDR408x family of road profilers are precision, non-contact ASTM E950 Class 1 pavement profilers. These systems primarily consist of infrared laser height sensor(s), precision accelerometer(s), a distance measuring unit and an industrial hardened IBM compatible PC. The complete system is state of the art, composed of hardware and software that is mounted into a vehicle according to the customer's data collection needs.

The profilers can be configured with 1 to 30 height sensors, single or dual accelerometers and any subsystem the client wishes. The profiler is primarily used to rate pavement ride (IRI, PI, RN, Rolling Straightedge), rutting, texture and faulting. In addition, the system will produce a profilograph simulation with bump / dip locations and must grind lines. The system collects accurate, repeatable data between 5 to 70 MPH.

These systems are non-vehicle dependent and measurements will not be affected by vehicle speed or suspension, temperature, sunlight, pavement color or texture and wind. All data is collected in real time, displayed on a Flat Panel for the operator viewing, recorded to the hard drive for future analysis and sent to a parallel printer for a graphical report. ICC's profilers are so accurate and dependable that they were chosen by the FHWA for their LTPP Program.

## High-Speed Profilers



To date, ICC has installed over 600 systems into different vehicles for high-speed data collection.

## Lightweight Profilers



**INTERNATIONAL CYBERNETICS CORPORATION**

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## Specifications

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- ASTM E950 Class 1 Profiler
- Certified Equal for the Profilograph
- Height Sensor(s)
  - High frequency, infrared laser
  - Measurement accuracy – 0.025 mm / 0.002 in.
- Accelerometer(s)
- Profile Sampling Rate:
  - Continuous longitudinal coverage saved at user specified intervals (1” up to 18”)
- Profile Repeatability – 0.5mm / 0.02 in
- Profile Bias – 0.005 in (average), 0.05 in (absolute)



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