IRIMETER-1

Vehicle Mounted IRI Measurement System

IRIMETER-1 vehicle-mounted road roughness measuring device measures the International Roughness Index (IRI) of different road surfaces.



This vehicle mounted profilometers includes a control unit with graphic LCD display, one or two wireless inertial sensors, induction sensor for distance measurement and a roof magnet-mounted GPS antenna. The inertial sensors are mounted to MacPherson type front suspension of the vehicle. Cables are used to connect the sensors to the rest of the system.

IRIMETER-1 can be used on paved or unpaved roads. Wet, snowy or dusty road surface do not influence the accuracy of measurement.

All measured data together with measurement location is stored and can be downloaded to a computer via USB connection and can be viewed as graphs, tables and maps. Software is provided for easy processing and display of the data.

The sensors of the device are rated IP67 under the international IEC 60529 standard and are waterproof. Control unit is rated IP65 and is splash and dust proof.

IRIMETER-1 Features and Benefits

- Compact and easy to set up and use
- Real-time calculation and display of measurement results on LCD
- GPS unit to determine and store measurement location
- Control, central and sensor units
- Sensor unit(s) connected with cable
- Optional crossfall inclination sensor

Parameter	Units	Value
Data storage capacity	km	1200
IRI measurement resolution	mm/m	0.1
Average IRI calculation setting	m	5, 20, 100
Supported vehicle speed	km/h	20 - 100
Power supply	V	12 from battery
Operating temperature	°C	-20 to +50
Dimensions	mm	90 x 120 x 60 (control)
		90 x 160 x 60 (central)
		100 x 55 x 50 (sensor)
Total weight	kg	2.5

