



RD-M1
ROAD RESURFACING SCANNER





Vehicle Mounted Scanner, Built for Speed

- Downward-facing laser scanner for optimal road surface definition
- Scan at speed – no lane closures needed
- Collect millions of points safely from your vehicle
- Scan rates up to 100 times per second
- Easy installation and removal for daily use
- Intuitive data collection software

Smart start to a better way

In most road resurfacing scenarios, delivering a perfect project estimate is a challenge. Today, those challenges are answered by incorporating an RD-M1 scanner to your toolbox. A detailed depiction of existing surface conditions allows you to confidently discuss the amount of material to be removed or placed for any given section of road – giving your client or regulatory authorities confidence that you will complete the job on time and on budget.

Complete your paving or milling solution

3D point data from the RD-M1 scanner serves as the basis for detailed road surface designs using our unique MAGNET® Office Site with Resurfacing software. These ground truth surfaces are a part of our SmoothRide™ system workflow – ready to guide automated milling and paving machines.

Data collection in the fast lane

The RD-M1 scanner was purpose-built for road resurfacing applications to deliver precise surface conditions over long and complex roadways. These first steps allow you to conquer paving and milling projects by knowing the conditions before you begin – saving you time and money.

The sophisticated design works seamlessly with an integrated HiPer SR GNSS receiver as well as an Inertial Measurement Unit (IMU) to confidently capture point data while traveling at speed. Cruising at normal highway speeds, your data is automatically timestamped and instantly stored for the next step of easy management and point cloud generation.

Electrical	
Supply Voltage	9 to 32 VDC
Supply Current	3A operating current 7.5A surge current
Physical	
Housing	Powder-coated, cast aluminum
Weight	12.5 kg
Environmental	
Dust/Water Rating	IP66
Performance	
Scan Ratio (spacing at 40 mph every 0.6 feet)	100 scans per second 28500 points per second 255 intensity levels single pass scan
Kinematic Survey Elevation Accuracy	< 10 mm, 1 Sigma, on curvy road section* < 5 mm, 2 Sigma on straight road section**
* in comparison with total station: 80% out of 250 points data set < 10mm elevation difference, cross slope up to 12%	
** in comparison with total station: 100% out of 40 points data set < 5mm	



For more information:
topconpositioning.com/rd-m1

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