# Data Sheet Bike Lane Pavement Tester

#### Key Benefits:

- You get the most accurate, reliable, and long-term calibration stability of any profiler on the market.
- Real-time profile data calculation
- Optional Texture Laser can collect real-time mean profile depth (MPD) macro texture.
- Optional GPS and digital photo logging can be stored with profiler measurement data.
- 5G accelerometers that provide a very high precision of 0.01G.
- Ethernet communication between portable profiler electronics and the data storage tablet PC on the handle of the bike.

#### Key Features:

- ROW Camera
- GPS
- One texture laser
- Accelerometer
- Tablet computer DMI GPS tracker
- DMI
- GPS tracker
- Inverter for tablet charging
- Build in long-life battery to the measuring unit
- Build-in intelligent charger
- 2 x batteries + charger for the bike

# Introduction to Bike Lane Pavement Tester

Investing in the evaluation of bike lane pavement represents a strategic and cost-effective choice over the long term.

#### To assist with data analysis IRI and RN

Calculate International Roughness Index (IRI), Ride Number (RN), Evenness Coefficient (EC0.5 and EC2.5) and optionally macro texture, GPS data and digital photo logging. The "Stop & Go" feature allows IRI and EC at junctions, traffic lights, roundabouts etc. Ideal for measuring bike lanes in urban areas.

#### **Software**

Dynatest Data Collection (DDC) is used with the Road Surface Profilers (RSP). The DDC facilitates the collection of data from the bike and transfers it to our data analysis program.

Reports can be customizable and data export in various formats.

- Network (Roadway section database).
- DMI (Displays Distance Measurement readings).
- Speedometer (Shows your driving speed).
- Thermometer (Air, surface, asphalt temperature).
- GPS (Geographical coordinates and a map).
- Camera(s) (Displays and saves images from your cameras).

## Measure Specifications

#### **RSP Mark IV**

RSP 1 laser.

#### Accelerometer:

The purpose of the accelerometers is to track the vertical motion of the lasers through space.

#### The photo sensor

The photo sensor shines modulated, infrared (IR) light on the pavement and measures the amount of IR reflected.

#### **Distance Encoder**

The distance encoder produces counts of the bikes tire making it very



# Compliance with Industry standards:

EN 13036-6: Road and airfield surface characteristics - Test methods -Part 6: Measurement of transverse and longitudinal profiles in the evenness and mega texture wavelength ranges.

AASHTO R 56-14: Standard Practice for Certification of Inertial Profiling Systems.

ASTM E950/E950M-09: Standard Test Method for Measuring the Longitudinal Profile of Traveled of Traveled Surfaces with an Accelerometer Established Inertial Profiling Reference.

TxDOT Tex-1001-S: Test Procedure for Operating Inertial Profilers and Evaluating Pavement Profile".

## Specifications of the Bike

Colour	Mat Black frame (5 treatments containing: Paint, lacquering, antirust treatment and anti-slip seal) You can add promotional material on the bike – please contact us for price and design specifications.
Handle and seat	High quality adjustable seat with shock absorber and extra comfort. Adjustable bicycle handle with ergonomic leather handle that can be adjusted in height.
Steering:	Newest" Anti-Tilt" patented steering/handlebar system with self- straightens adjusting function. Makes it super easy to turn and steer, straightens automatically
Display:	Tablet PC
Frame:	Anti-Tilt patented steering/handlebar system with self- straightens adjusting function. Makes it super easy to turn and steer, straightens automatically.
Electronic:	"Walking mode": Hold down a button on the display and the bike drives up to 5 km/h.
Motor:	Powerful and robust 250W Brushless engine with latest "Low- Energy Consumption & No Noise" technology and provides up to a maximum of 25 km/h at the highest speed level and of course CE approved.
Battery:	36V, 13 Ah Li-ion battery – 468WH – Anti-theft lock (CE, GS and TUV approved).
Charger:	Intelligent TURBO charger, with reduced charging time and stops charging when the battery is fully charged, CE, GS & TÜV approved
Gear:	7 external Shimano Tourney(SIS) gear with freewheel and a Shimano front gear shifter.
Brakes:	Tektro / Bengal hydraulic brakes with electric brake system + parking brake
Front wheels:	20" Strong anti-puncture Kenda tires with reflection line.
Back wheel:	26" Strong anti-puncture Kenda tire with reflection line.
Rims:	Aluminum wheels heavy duty stainless spokes.
Loading capacity	150 kg.
Box dimensions:	218 x 84 x 122cm. (L X W X H).
CE:	CE marked / Approved.
Weight:	47 kg.
Battery	36V, 13AhLi-ion battery Anti theft protection CE, GS and TÛV approval

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