

CrankSense WIRELESS CRANKSHAFT DEFLECTION TEST KIT

CrankSense by Motionics is a wireless crankshaft measurement test kit that utilizes a Motionics Bluetooth crankshaft gauge. Using an iPad or Windows PC, users can now easily and accurately record deflection data.

Built-in tilt angle sensor shows the crankshaft angle live in the software and notifies users once the crankshaft rotates to test locations. Also, the data capturing at certain angles can be set in auto mode with the tilt angle sensor.

After each test, CrankSense automatically calculates horizontal and vertical deflection based on gauge readings. On Windows, it also generates deflection plots and creates PDF reports.



BLUETOOTH
LOW ENERGY



RECHARGEABLE
BATTERY



ALL-IN-ONE
GAUGE



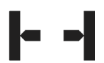
DEFLECTION AND
ROTATIONAL DATA



MULTI-PLATFORM
SOFTWARE



DATA
SAVING



ADJUSTABLE
RODS



Designed for
Safety, Accuracy and Efficiency

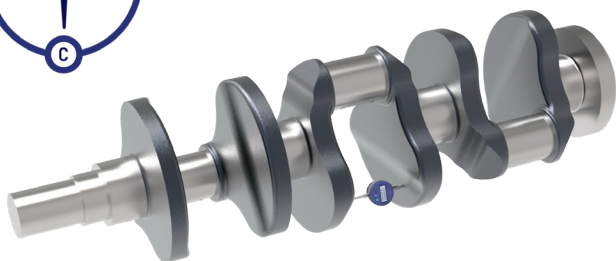
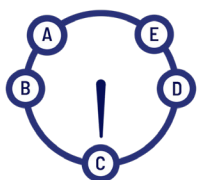


BLUETOOTH CONNECTIVITY

CrankSense's Bluetooth technology allows for real time data collection and transmission. Automatic wireless transfers maximize worker safety while minimizing the risk of human error.

ADJUSTABLE GAUGE SIZE

CrankSense includes an extension rod set and adjustable attachments, allowing the gauge length to be tailored for various web gap distances. Standard gauge lengths are listed in the Spec Sheet table. Custom configurations are also available. Contact us to discuss your specific requirements.



ANGLE TILT SENSORS

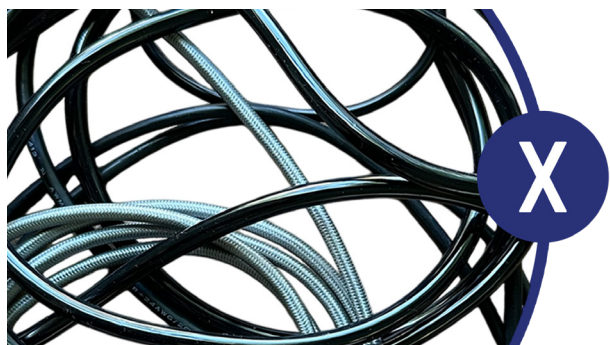
The built-in rotating tilt angle sensor continuously detects the crankshaft's angular position and displays it live in the software. This enables users to capture deflection readings at the correct position. Automatic data capture at predefined angles is supported in the Windows software.

RECHARGEABLE TRANSMITTER BATTERY

The CrankSense wireless transmitter has a battery life of 30hrs on a full charge and is recharged by the MicroUSB port on the back of the device. The digital dial operates on a SR44 or LR44 coin battery and is replaceable.





**UP TO 30HRS
BATTERY LIFE**



WIRELESS DESIGN

CrankSense's innovative standalone gauge design enables wire-free crankshaft deflection testing, allowing operators to take precise and accurate measurements from a safe distance.

COMPATIBLE PLATFORMS	MAXIMUM CONNECTIONS	FEATURES OVERVIEW
 iPadOS  Windows	<div>1</div> <div>12</div> <div>iPadOS</div> <div>Windows</div>	Wireless Data Recording • Tilt Angle Indicator Table Organized Results • Automatic Test Point Notifications Automatic Deflection Calculations • End Play Test Included Test Report Generation • Edit Engine Configuration Settings Tester Signature • Email Reports • Wireless Print Reports

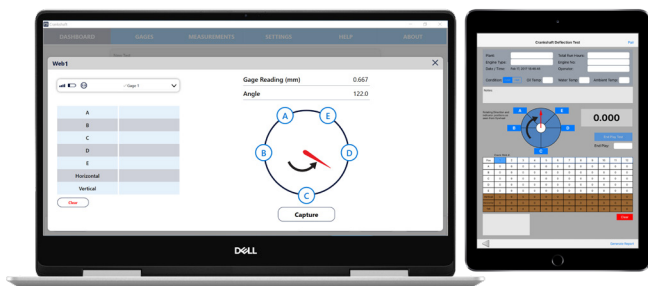


WIRELESS DATA RECORDING

When used with Motionics' CrankSense wireless gauge(s), the software allows the user to view and record angle and deflection measurements for crankshaft web gaps remotely, in real time, on your iPad or Windows PC.

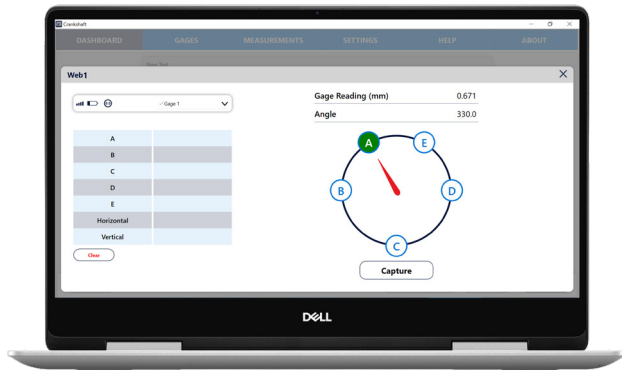
SIMULTANEOUS TESTING WITH MULTIPLE GAUGES

With CrankSense for Windows, your PC can connect to multiple gauges, displaying and recording data simultaneously. This allows you to conduct a crankshaft deflection test with live data recording from multiple webs.



ROTATING ANGLE INDICATOR

Motionics' wireless CrankSense gauge has a built-in angle sensor, and the software displays this angle as a rotating needle on the dashboard so you can visualize the crankshaft's rotation in the software.



AUTOMATIC TEST POINT NOTIFICATIONS

When the gauge reaches a test point, the point changes color to indicate when measurements should be captured in manual test mode. The user can also select auto test mode, enabling the software to automatically capture readings at test locations when the crankshaft rotates to the right test point.

MEASUREMENT RESULTS TABLES

Both CrankSense for Windows and the CrankSense iPad app allow users to view all the data collected in an organized chart during, and after, the test.

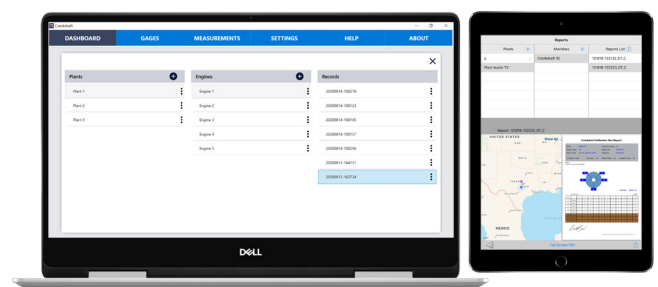


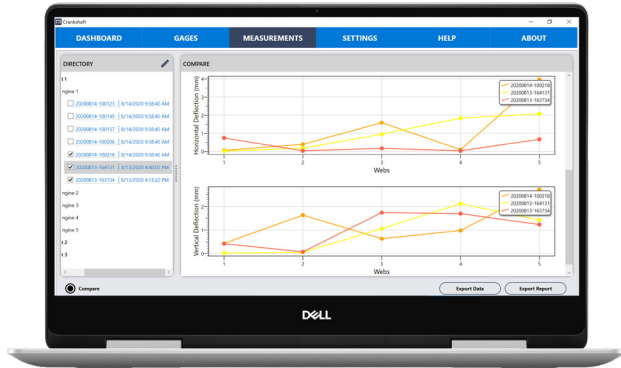
AUTOMATIC VERTICAL/ HORIZONTAL DEFLECTION CALCULATIONS

Vertical and horizontal deflection values are calculated and displayed automatically in real time as deflection readings are taken at set test points.

LOCAL RECORD MANAGER

Test records are stored locally in the software in a 'Plant>Engine>Record' structure. The user can access test records at any time under the Measurements tab to review test results, export test data in a CSV file or generate a test report.



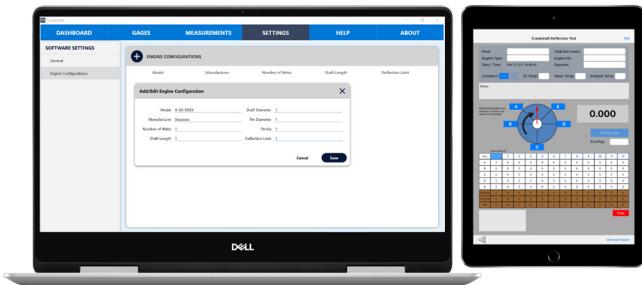
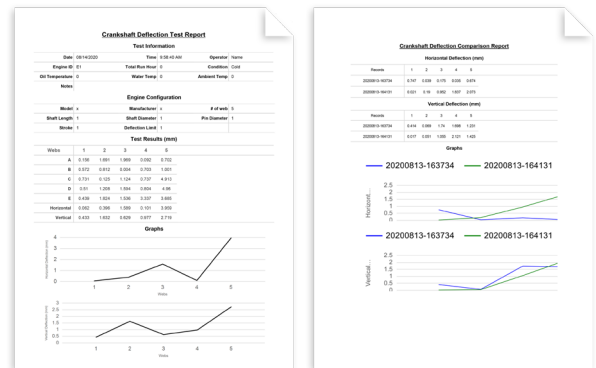


COMPARISON OF DEFLECTION TESTS

In CrankSense for Windows, you can select multiple records to compare crankshaft deflection changes over time in chart and graph forms.

TEST REPORT GENERATION

After conducting your test, you can generate a test report, either for comparing multiple tests (Windows only) or for a single test (both iPad app and Windows).



SAVE ENGINE CONFIGURATION

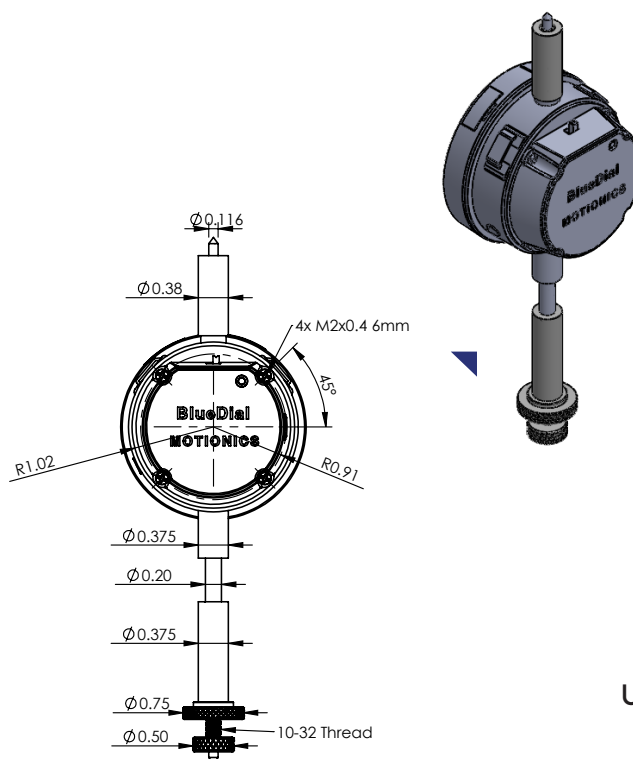
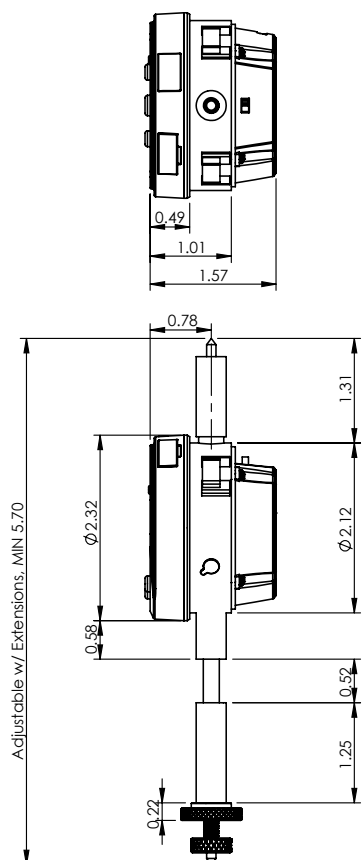
You can edit engine configuration details, such as model, manufacturer, number of webs, and length. In the Windows software, you can save engine configurations in a local library for reuse in future tests.



PRODUCT SPECIFICATION

Resolution	0.001" (0.003mm)
Measurement Range	0.4" (10mm)
Connectivity	Bluetooth 4.0
Accuracy	±0.00012" (0.003mm)
Wireless Data Transmission Rate	10Hz
Transmission Range	65ft (20m) indoors / 100ft (30m) outdoors
Crankshaft Web Gap Range	5.71-28.35" (145-720mm) Customize model covers shorter ranges down to 3.94" (100mm)
Working Temperature	32-122°F (0-50°C)
Transmitter Battery	400mAh Rechargeable / 30hrs
Digital Dial Battery	Replaceable SR44 or LR44 coin battery / 2 years
Charging	5VDC USB
Angle Measurement Resolution	Built-in Rotating Angle Measurement with 1° Resolution

DIMENSIONS



Unit: Inches



SCAN FOR

- PRODUCT INFO
- VIDEOS
- SUPPORT
- DOWNLOADS
- WARRANTY
- FAQs



motionics.com/cranksense

Motionics, LLC

© 2025 Motionics, LLC. All rights reserved.
www.motionics.com • info@motionics.com