



IRIS M™

Enhancing Vision

The world's first non-contact Motion Amplification® software platform.

THE POWER OF TECHNOLOGY

Iris M™ from RDI Technologies™ is the first device of its kind that allows users to see - in real time - motion that is invisible to the human eye. Our proprietary Motion Amplification® software lets you see the invisible.

The Iris M platform from RDI Technologies monitors critical manufacturing operations, processes, quality and structural components that affect plant reliability and productivity. Iris M is a unique, revolutionary technology that detects subtle movement and converts that movement to a level visible with the naked eye. By turning every pixel in the camera into a sensor, Iris M takes millions of measurements in a fraction of a second. And it does this with no physical connection to your machinery or equipment.



The Iris M technology platform delivers real-time video to users, enabling them to make instant decisions about manufacturing operations based on real data. The ability to visualize the entire process while retaining component-level analysis makes Iris M the perfect tool for screening, fault finding, baseline or commissioning and pre/post repairs or retrofits. Every step of the way, Iris M provides specific information about the process or issues at the root of a quality problem.

Iris M's proprietary Motion Amplification® software produces easy to understand videos of the actual movement across your equipment or machinery which enables far more effective communication between technical and nontechnical personnel, enhancing decision-making. Videos from the Iris M platform are produced within seconds of data collection. In other words, Iris M saves you time and money.





FEATURES

LIVE MOTION AMPLIFICATION®

Apply amplification before acquiring a recording. Scan assets instantly to see motion in real time.

TIME WAVEFORMS, SPECTRA, AND ORBITS

Unlimited number of regions can be drawn in the video to measure displacement. All measurements are simultaneous.

STABILIZATION

Entire frame and region based image stabilization.

DATA EXPORT

Export waveform, spectra, orbits, and object paths to .csv file.

FREQUENCY FILTERING

Bandpass, bandstop, lowpass, and highpass filtering of time waveform and video.

MOTION MAPS

Show colorized image overlays of individual frequencies or overall motion.

TOP FREQUENCY FILTERING

Automatically determine frequencies of interest and create multiple filtered data sets with a single click.

SHAFT INSPECTION

Visually inspect rotating shafts and measure their displacement while under operation.

TRANSIENT MOTION AMPLIFICATION®

See Motion Amplification® of small motions as an object moves through the scene.

TRANSIENT PATH PLOT

Show the path of an object in the video as well as in the plot.

VIDEO ANNOTATIONS

Add text, shape, annotations, and company logo overlays with export to video.

VIDEO SIDE-BY-SIDE

Side-by-side playback of original and Motion Amplification® video.

SPECIFICATIONS

LENSES

6mm, 12mm, 25mm, 50mm, 100mm.

ACQUISITION SYSTEM

i7 processor, 16GB RAM, 500GB SSD, dual batteries, lightweight, MIL-STD-810G standard drop protection, 3 yr accidental damage protection.

SAMPLE RATE

180 fps in HD, up to 1,300 fps at reduced resolution.

FREQUENCY RANGE

Up to 5,400 CPM @ 180 fps
Maximum: 39,000 CPM at 1,300 fps with reduced resolution.

MINIMUM DISPLACEMENT

<0.01 mils (0.25 μ m) at 3.3 ft (1m) with 50mm lens, 0.005 mils (0.125 μ m) at close focus.

PLAYBACK/EXPORT SPEEDS

4x original framerate to 1 fps.

MOTION AMPLIFICATION® FACTOR

1-500x.

USB3 CABLE LENGTH

9.84 ft (3m).

OPTIONAL ACCESSORY KIT

LED light: 23,000 Lux @ 1 m, Li-ion light battery, light stand, extra vibration pads, computer stand.