



# 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  $\mu$ m) at 3.3 ft (1m) with 50mm lens, 0.005 mils (0.125  $\mu$ 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.