IRIS CM ™

Enhancing Vision

Powered by **Motion Amplification™**

▶ **THE POWER OF MOTION AMPLIFICATION™**
WITH THE BENEFITS OF CONTINUOUS MONITORING

RDI's Motion Amplification™ platform 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 CM™** takes millions of measurements in a fraction of a second. And it does this with no physical connection to your machinery or equipment. With **Iris CM**, you now have the ability to see what is happening on your machines even when you are away. Once configured, **Iris CM** can continuously monitor your asset with live Motion Amplification™, trigger and store recordings, and provide all the data analysis of Motion Amplification™ software. Best of all, once you solve the problem with your asset, just move the system to the next asset and start all over. Solve your toughest problems, solve your intermittent problems, solve it with **Iris CM**.

- 90 minutes worth of HD video stored per camera

- Live Motion Amplification™

- Portability: Not permanently tethered to an asset and easy to move and configure

- 3 industrial grade cameras

- Trigger recordings based on physical or virtual camera-based sensors

- Analyze data from before or after triggering

- Record and analyze transient events

- Troubleshoot over long periods of time

- Determine the root cause

- Quantify vibration, amplitude, frequency, and phase for anything visible in the recorded video

- Test and visualize your assets over periods of time

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▶ SEE IT. SHOW IT. **FIX IT.**

Specification

Iris CM and Motion Amplification™	
Industrial Grade Cameras	(3) USB 3.0, high resolution CMOS sensor, 2.3 megapixels
Lenses	6mm, 12.5 mm, 25mm, 50mm, 100mm
Server Specifications	Intel i9 processor, 2 TB Samsung SSD for persistent storage, 32 GB RAM
Sample Rate	120 fps, up to 1,300 fps at reduced resolution
Frequency Range	Up to 3,600 cpm @ 120 fps Maximum: 39,000 cpm @1,300 fps with reduced resolution
Minimum Displacement	<0.1 mil (2.5 μm) at 3.3 ft (1m) with 50mm lens
Motion Amplification™ Factor	1-50x
Tripods and Mounts	Professional grade tripods with pistol grip, clamp mounts, magnetic mounts
USB3 Cable Length	9.84 ft. (3 m) and 65.61 ft. (20 m) (3 each)
Lighting Kit	(2) LED Light 23,000 lux at 1 meter, lithium ion light battery, light stand

Features

Iris CM and Motion Amplification™	
Live Motion Amplification™	See Motion Amplification™ video live with no processing time needed
Multiple Cameras	Acquire simultaneous data from 3 cameras from different views
Triggers	Trigger via USB accelerometers or video ROI sensors with live data
Trigger Types	Time-based, video ROI displacement, accelerometer (waveform pk-pk or spectrum digital overall)
Compatible Format	All data is compatible with existing Motion Amplification™ software
Data Transfer	Files are automatically downloaded to client PC when triggers occur
Frequency Filtering	Bandpass, bandstop, lowpass and highpass filtering of time waveform and video
Stabilization	Entire frame and region based image stabilization in post processing
Time Waveforms, Spectra, and Orbits	Unlimited number of regions can be drawn in the video to measure displacement. All measurements are simultaneous.
Long-term Recording	Continual recording with a 90-minute buffer per camera
Video Extraction	Extract and perform Motion Amplification™ data from anytime in the last 90 minutues
Auxillary Extraction	Extract video from all cameras based on a single trigger

RDI TECHNOLOGIES | SEEING IS BELIEVING

verified industrial maintenance **solutions**

vIMS®