



IRISTMM

+ STEREO VISION

THE POWER OF TECHNOLOGY

Iris MTM + Stereo Vision is a two-camera Motion Amplification[®] system that will enable full-field vibrational measurements to be taken simultaneously in all directions (3 dimensions/axes). Iris M + Stereo Vision uniquely gives users the ability to acquire synchronized waveform and spectral data for virtually any region of interest, anywhere on the asset in just one data capture. This multidimensional measurement is engineered to function as one system, helping to avoid over- or under-testing problems caused by single-axis vibration tests. Iris M + Stereo Vision increases visibility, efficiency, and helps users see patterns, trends, and non-obvious relationships in just a single test.

FULL FIELD-OF-VIEW, SYNCHRONIZED, MULTIDIMENSIONAL VIBRATION IMAGERY IN ONE SYSTEM

- Measure more in one field of view
- See patterns, trends, and non-obvious relationships with full field of view
- Reduction in set-up time in the field; more versatile
- Automated, immediate data
- Synchronized, single point of multidimensional data
- Imagery driven insights that are easy to capture and understand
- Less costly than triaxial sensors





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.

3D MEASUREMENT

Measurements can be displayed for all three dimensions (X, Y, & Z) for waveform and spectrum plots.

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

(2x) 12.5mm, 25mm, 50mm
*lenses are calibrated to each camera

MOTION AMPLIFICATION® FACTOR

1-500x

SAMPLE RATE

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

MINIMUM DISPLACEMENT

XY-axis: <0.01 mils (0.25 μm) at 3.3 ft (1m) with 50mm lens, 0.005 mils (0.125 μm) at close focus
Z-axis: 0.6 mils at 3.3 ft (1m) with 50mm lens

PLAYBACK/EXPORT SPEEDS

4x original framerate to 1 fps

USB3 CABLE LENGTH

(2x) 9.84 ft (3m) USB3.0

FREQUENCY RANGE

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