



# IRIS

## EXPLORER

### THE POWER OF TECHNOLOGY

Boston Dynamics の Spot® の機動性と、RDI Technologies の Motion Amplification®の卓越した可視性を組み合わせた Iris Explorer™ Spot Payload により、遠隔や危険な環境下でも、資産に直接次世代振動解析を行うことができます。



企業の資産管理プログラムには、動的な可動性と遠隔操作機能を備えた大容量かつ再現性の高いレートベースの振動解析ソリューションが導入されています。人間の目には見えないたわみ、変位、動き、振動を自律的に測定する Iris Explorer は、リスクを最小限に抑え、コンプライアンスの維持に役立ち、資産の信頼性とパフォーマンスを改良するために資産の投資対効果を向上させます。



Spot®の自動歩行ミッションを作成することなく、重要な資産の評価や1回限りのデータ収集が可能です。

時間波形とビデオのバンドパス、バンドストップ、ローパス、ハイパスフィルタリング

#### STABILIZATION

Entire frame and region based image stabilization.

#### MOTION MAPS

Show colorized image overlays of individual frequencies or overall motion.

#### TRIGGERED EVENTS

Virtual camera-based sensors, ROI triggers (waveform pk-pk, spectrum digital overall, spectrum frequency band), Manual Triggers.

#### AUTONOMOUS MODE

Users can recall previously programmed routes. Scheduling feature available through Boston Dynamics software features. Data measurements can be automatically trended.

#### VIDEO ANNOTATIONS

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

#### DATA EXPORT

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

#### TOP FREQUENCY FILTERING

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

#### VIDEO SIDE-BY-SIDE

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

#### INTERACTIVE MODE

Once a route is created, the interactive mode will allow the user to make adjustments (add, delete, modify) to actions, triggers, camera views, and even control where the robot navigates.

#### TIME WAVEFORMS, SPECTRA, AND ORBITS

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

#### AUTOMATED CAMERA CONTROL

Mission Explorer supports new hardware that will allow for remote operation and automation of several camera settings, such as focus and brightness.

#### AUTONOMOUS LIGHTING MODE

Lighting can be automatically set to come on or stay off every single time or the user can let the software make the determination using a set point value to determine whether lighting should turn on or not.

## SPECIFICATIONS

#### INDUSTRIAL GRADE CAMERA

USB 3.1, high-resolution CMOS sensor, high definition.

#### MOTION AMPLIFICATION® FACTOR

1-500x.

#### ACQUISITION SYSTEM

Server with Intel i7, 16GB Ram, 500GB storage, environmentally sealed design, wide temperature operating range, shock and vibration resistant, 3-Year warranty.

#### FREQUENCY RANGE

0 CPM (0 Hz) to 5,400 CPM (90 Hz) at 180 fps.

#### 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.

#### ANALYSIS DEVICE

Ruggedized Tablet with Acquisition Software (Intel Core i7, 14" FHD outdoor viewable touch screen, 16GB RAM, 1TB SSD, stylus pen, chest, and hand straps, 3 YR Warranty).

#### SAMPLE RATE

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

#### LENSES

16mm Varioptic Lens.