



Sensor Solutions for Safe, Efficient Runways

# RunWize™

The Runway Management Solution



# The Challenge

The airport's runways serve a unique central function within the airport's infrastructure footprint. The present and future exponential growth in air traffic presents a challenging operational environment as airport operators are looking to increase the efficient and effective use of their runways.

Each day, aircrafts face various forms of runway-based threats, including birds, wildlife and a wide range of foreign object debris (FOD) coming from aircraft parts, engines, landing gear or tires. Winter time presents additional dangers, mainly due to impaired view of the runway during rain or fog.

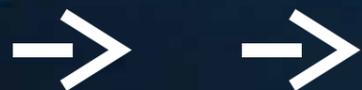
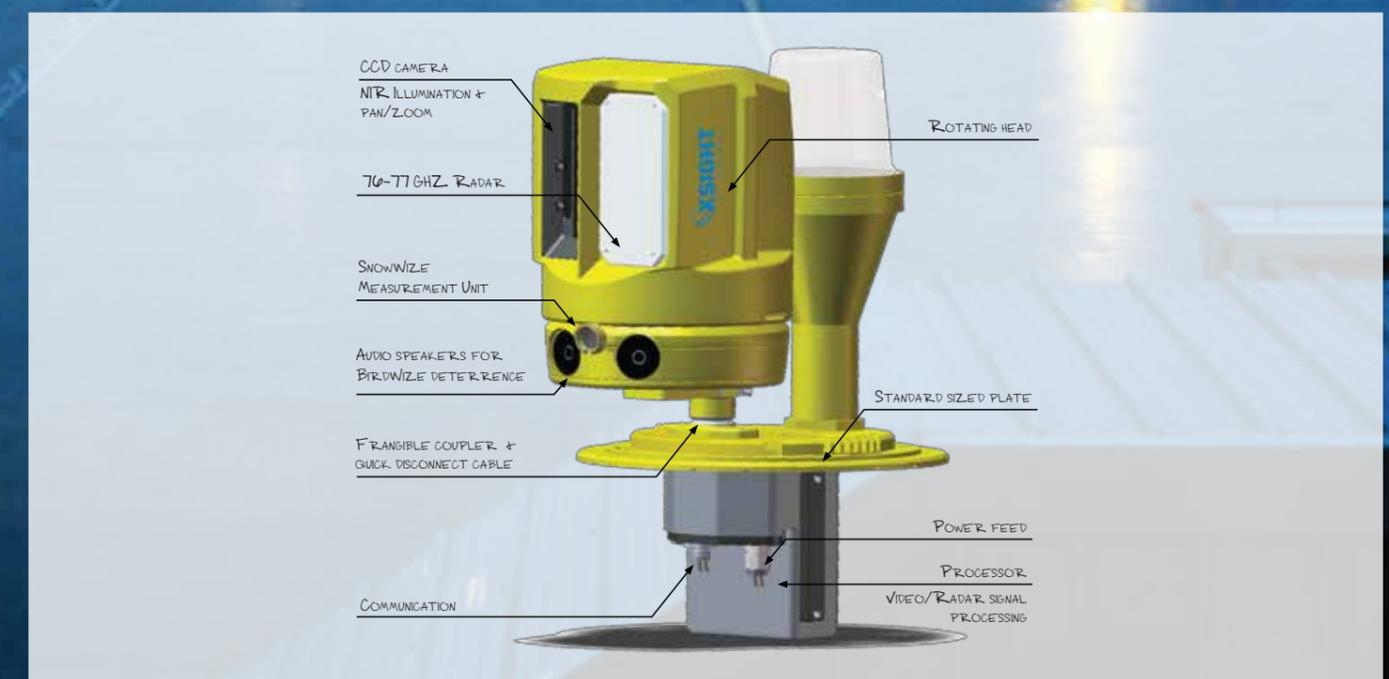
With the high volume of arriving and departing flights every day in airports around the world, an effective runway management solution that can provide comprehensive and reliable command of the runway and its surroundings is essential. Better management not only enhances safety and security, but saves airports and airlines countless hours in time, money and manpower.

# The Solution

RunWize improves the day to day operation of runways whilst increasing runway safety, capacity and efficiency. RunWize is a unique distributed solution collocated with runway edge lights and utilizes a combination of millimeter wave radar, optical camera and image processing algorithms to best detect FOD, birds, wildlife and monitor runway condition and activity.

FODetect® is an automated and comprehensive FOD detection solution and the cornerstone of RunWize, consisting of the following additional enhancements: BirdWize, ViewWize, SnowWize and FODspot.

## Surface Detection Unit (SDU)





## FODetect:® Automated FOD Detection

FODetect is an automatic, comprehensive foreign object debris detection solution, compliant with FAA AC 150/5220-24. FODetect provides visibility over the entire runway, day or night, including inclement weather conditions, scanning between each aircraft movement. FODetect not only markedly enhances safety, but also increases operational efficiency and runway capacity.

FODetect combines the power of millimeter-wave radar, high-resolution NIR-illuminated optic sensors, and proven advanced image processing. Together, these technologies enable viable runway sensing at a previously unprecedented level of accuracy for objects, sized down to an aircraft rivet.



## FODspot :

Hotspot Automated FOD Detection. Based on Xsight Systems' FAA approved FODetect, FODspot is a scalable system for detection and monitoring of FOD at critical airport intersections and other airside operations FOD hotspots.



## BirdWize™: Runway Ground Level Bird Hazard Management

Based on an FAA and USDA research, over 40% of bird strikes occur at ground level. BirdWize offers comprehensive runway ground level bird hazard management. By providing constant surveillance, automatic bird recognition and remote bird auditory deterrence, BirdWize enables safe and continuous runway operations during day and night.



## BirdWize™ Features:

- BirdWize can be activated from Xsight's mobile application:
  - Registers runway bird behavior enabling proactive measures to reduce bird strike risks
  - Automates manual procedures, where's no need to dispatch personnel to detect and deter hazardous birds on the runway



# About Xsight Systems

Xsight Systems is the provider of advanced runway sensor solutions chosen by leading airports worldwide. For the first time in aviation history, Xsight Systems runway solutions present a new paradigm in runway management and allow constant command over airport runways and their surroundings. Xsight Systems enables airports to manage runways more efficiently and feel confident that runways are safe, secure and clear for operations. Solutions from Xsight Systems, having exceeded FAA regulatory requirements, have been adopted by major airports including Boston Logan, Seattle-Tacoma and by top-tier integrators such as Thales Group. For more information, please visit [www.xsightsys.com](http://www.xsightsys.com).

## Contact Info

[marketing@xsightsys.com](mailto:marketing@xsightsys.com)

North America  
Xsight Systems Inc.  
T: +1-781-330-8466

Worldwide  
Xsight Systems Ltd.  
T: +972-3-910-2562

