RAPTOR SCIENTIFIC

NEW PRODUCT

NEXIS R1

Key Features

High Speed - 10' LSAR/CSAR in **less than 30 seconds**!

Superior Sensitivity - Homodyne architecture provides **> 30 dB better noise performance** than traditional pulsed systems

Clutter Rejection - Optimized antennas reduce real world clutter

Highly Mobile - from handheld to fully autonomous configurations

Agile Form Factor - Modular support structure enables full aircraft accessibility, including under the aircraft

The **Next Generation Inspection System (NEXIS)** is a scalable family of integrated systems for measuring radar cross section (RCS), material studies, antenna measurements, and more. NEXIS builds on the proven InfiniScan product line, adding modular technology building blocks for a tailored system configuration that is perfectly suited for all measurement scenarios; whether on the flightline supporting operational assets, in manufacturing providing quality assurance during production, or during engineering R&D.

With unprecedented collection speed and measurement sensitivity, NEXIS incorporates automated scanning capabilities into a small and agile footprint to unlock productivity that others can't even come close to while providing the data quality to exceed mission requirements. NEXIS supports standard measurement profiles of Linear, Circular, and Inverse SAR; and pushes the boundaries with advanced measurement profiles including Squinted SAR, Contour Following, Great Circle Matching, and even automated 2D Raster Scans for 3D imaging.

NEXIS offers a wide range of frequency coverage with simple, tool-free, interchangeable payloads ranging from VHF to Ka band; each supporting the full polarization matrix as well as external ports for antenna measurements or even bi-static collections. NEXIS comes standard with intuitive data acquisition software and a full suite of data processing tools. Additionally, data from the NEXIS system is output in a standard format that is compatible with pre-processors like SABER and PulSAR, other processing tools like Knowbell, and is even directly compatible with the Signature Diagnostics System (SDS) database.

Raptor Scientific® (formally SCI) has a rich history of providing field level verification systems to 5th and now 6th generation platforms. NEXIS is truly a next generation evolutionary growth product built from over 30 years of field level measurement experience.

RAPTOR SCIENTIFIC
Sensor Concepts, a Raptor Scientific company
Livermore, CA 94550

Manufactured in the USA
CAGE Code: 1K9E2

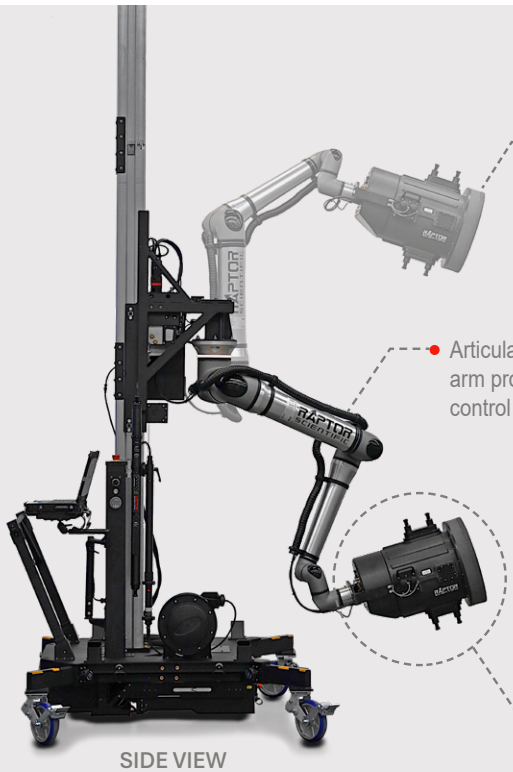
Phone: (925) 443-9001
E-mail: RFS-sales@raptor-scientific.com

NEXIS R1

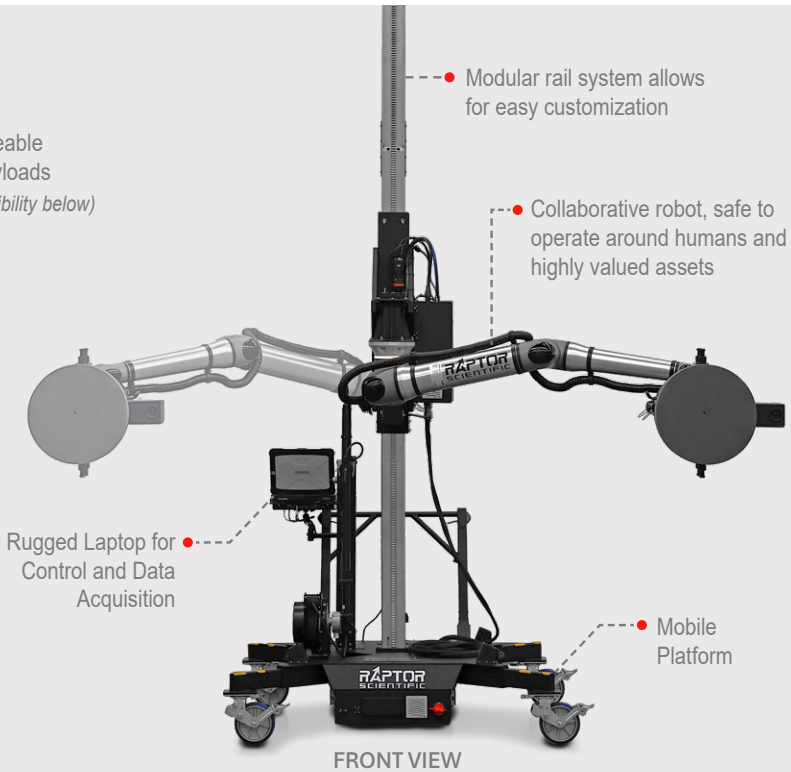
Next Generation Inspection System (NEXIS)

NEXIS R1 Specifications & Features

Measurement Modes	**Static:** 10' Extent **Dynamic:** Real-time compensated "InfiniScan style" unlimited apertures
Measurement Types	LSAR, CSAR (conical & great circle), ISAR (with compatible rotator), External Ports, 2D Raster, Contour Following
Compatible Payloads	**HH1:** 4 – 18 GHz / **HH2:** 2 – 18 GHz / **Band 3:** 2 – 18 GHz / **Band 4:** 26.5 – 39 GHz
Height	**Minimum:** 12 inches / **Maximum:** Scalable as needed
Tilt (Elevation)	> ±30°
Measurement Range	1 – 100+ feet (payload dependent)
Optical Camera (option)	4K, 30x Optical Zoom
Mobility	Autonomous, Manual
Power	**Operation:** Battery (10+ hours) or AC (110-240V @ < 15A) **Charging:** AC (110-240V @ < 15A)

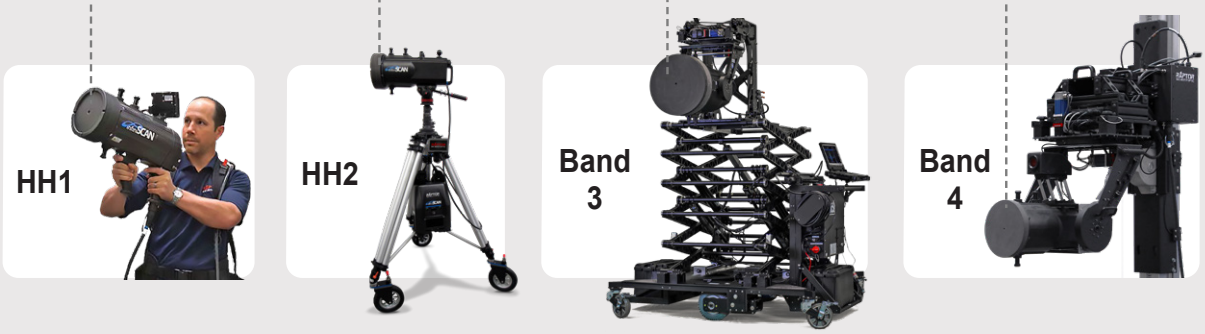


SIDE VIEW



FRONT VIEW

Compatible Payloads



RAPTOR SCIENTIFIC
Sensor Concepts, a Raptor Scientific company
Livermore, CA 94550

Manufactured in the USA
CAGE Code: 1K9E2

Phone: (925) 443-9001
E-mail: RFS-sales@raptor-scientific.com