

NEWSPACE MARKET · COMPANY PROFILE



Sisir Radar

India · founded 2021 · sisirradar.com

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PRODUCTS

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WITH DATASHEETS

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as of 20 August 2026



Sisir Radar

Sisir Radar Private Limited is an Indian spacetechnology company specialising in high resolution Synthetic Aperture Radar (SAR) for satellite, airborne, drone, ground-vehicle and handheld platforms. The company designs and builds world-class SAR payloads, Ground Penetrating Radar (GPR), drone-borne Hyperspectral Imaging systems and conventional radars, offering 24/7, all-weather situational awareness for defence, agriculture, mining, urban planning and environmental monitoring. Founded by Dr Tapan Misra — one of the world's foremost SAR experts and the architect of ISRO's first SAR satellite mission, RISAT — alongside co-founders Soumya Misra (CEO) and Urmi Bhambhani (CTO), Sisir Radar is developing SATSAR-Alpha-LP, a constellation of L & P band SAR satellites, as well as AirSAR-Alpha, a family of airborne/drone-borne L, P and X band SAR payloads. The company has won two IDEX challenges from the Indian Ministry of Defence, including for developing SAR satellite payloads for the Indian Air Force, and has partnered with DRDO, the Ministry of Defence, Bharat Electronics, Astra Microwave Products and others. Beyond SAR, Sisir Radar builds Ground Penetrating Radar systems for landmine/IED detection and mining applications (LMD-GPRX1-Indra, OD-GPRX2-Bhumi), a drone-borne hyperspectral imaging system (HySkyView-51), and in-house antenna measurement facilities (near-field and far-field) used to characterise its own RF payloads.

This profile is generated from the live NewSpace Market catalogue. Specifications are as published by the manufacturer; every product links to a page where a request for quotation reaches the company directly.

Product catalogue



SISIR RADAR
AirSAR-Alpha-L

Multi-channel L-band SAR payload for UAVs and aircraft, offering the world's highest resolution L-band foliage-penetrating imaging.

Frequency of Operation	L Band (1-2 GHz)
Altitude	10 km
Imaging Range	25 km
Range Resolution	1 m
Azimuth Resolution	0.75 m
Polarimetry	Hybrid/Full Polarimetry
Interferometry	Repeat Pass Interferometry

[price on request](#) [datasheet](#)



SISIR RADAR
AirSAR-Alpha-X

Multi-channel X-band SAR payload for airborne platforms, delivering ultra high-resolution imagery at 0.3-0.5 m resolution.

Frequency of Operation	9-10 GHz (X Band)
Altitude	Up to 1 km AGL
Imaging Range	5 km from nadir
Range Resolution	0.3-0.5 m
Azimuth Resolution	0.3-0.5 m
Optional Add-on Features	Hybrid/Full Polarimetry; Repeat Pass Interferometry
IMU/GNSS	Embedded high-performance IMU/GNSS unit

[price on request](#) [datasheet](#)

SISIR RADAR
HFF-AMF InnoWave 4 (Horizontal Far Field Antenna Measurement Facility)

Portable horizontal far-field antenna measurement facility delivering real-time 3D antenna radiation pattern and gain measurements.

Angular Precision	0.45 deg
Frequency Range	Customisable
Measurement Time (Per Plane)	5 minutes
Standard Dimension (L x W x H)	14 ft x 2 ft x 3 ft (customisable)

[price on request](#) [datasheet](#)



SISIR RADAR
NF-AMF Hexahedron (Near Field Antenna Measurement Facility)

Fully automated near-field antenna measurement system with anechoic chamber, 5 mm scan spacing and far-field projection.

Maximum Scanning Area	1.5 m x 1.5 m
Scan Speed	100 scan points, 5 cm spacing (10x10), in 4 minutes
Scanning System	Horizontal Planar Measurement System
Provided Antenna RF Cable Length	5-8 m
Height	Adjustable as required
Standard Dimension (L x W x H)	9 ft x 9 ft x 7 ft (customisable)
Supported RF Device	Vector Network Analyzer

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SISIR RADAR

VFF-AMF InnoWave 4 (Vertical Far Field Antenna Measurement Facility)

Vertical far-field antenna measurement facility for real-time antenna radiation pattern and gain measurement over the full frequency range.

Angular Precision	0.45 deg
Frequency Range	Customisable
Measurement Time (Per Plane)	5 minutes
Standard Dimension (L x W x H)	9 ft x 9 ft x 12 ft (customisable)

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Contact Sisir Radar

Open the company profile on NewSpace Market to see full specifications and datasheets, and to send a request for quotation that reaches the manufacturer directly.

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