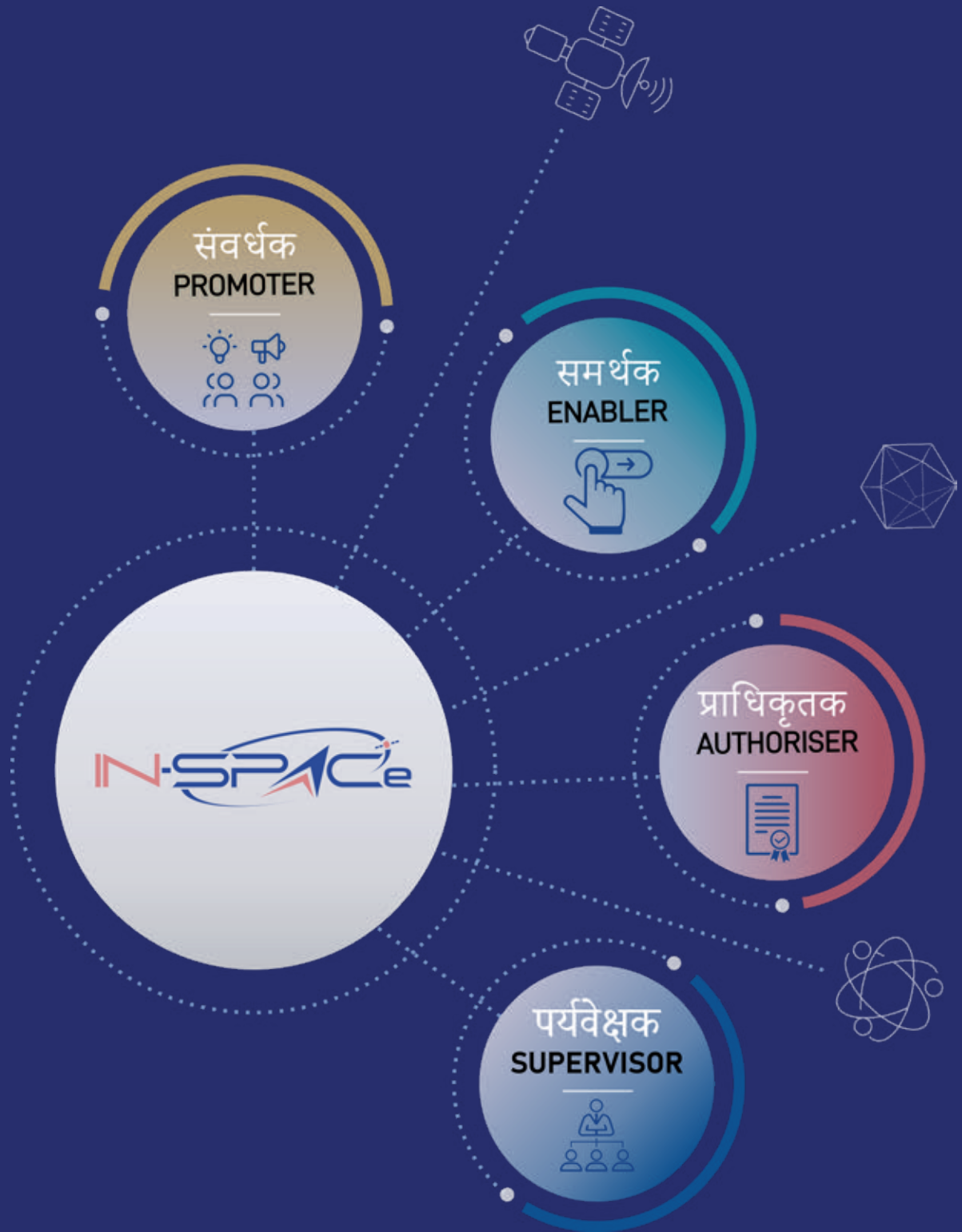




INDIAN SPACE INDUSTRY DELEGATION TO IAC 2024 MILAN, ITALY

Indian National Space Promotion and Authorization Centre
Department of Space, Government of India
Bopal, Ahmedabad-380058



ROLE OF IN-SPACe

IN-SPACe, established as a single-window agency for all space sector activities of Non-Government Entities (NGEs), plays an important role in boosting the private space sector economy in India.

CONTENTS

Aadyah Space	04
Agnikul Cosmos	06
Anvi Space Pvt. Ltd.	08
Ananth Technologies Pvt. Ltd.	10
Dhruva Space Pvt. Ltd.	12
Digantara	14
GalaxEye Space Solutions Pvt. Ltd.	16
HEX20LABS India Pvt. Ltd.	18
Hical Technologies Pvt. Ltd.	20
KaleidEO A SatSure Company	22
Larsen and Toubro	24
Manastu Space Technologies	26
OrbitAID Aerospace Pvt. Ltd.	28
Skyroot Aerospace	30
SkyServe	32
Tamboli Castings Ltd.	34
XDLINX Space Labs	36



Aadyah Space



Company Profile

Space-tech company focused on design-to-manufacturing of mission critical systems for launch vehicles, satellites and spacecraft platforms with space heritage in TVC, GNC, Power Distribution System, Flow Control Systems, Electronic Control Unit & Power Processing Unit. We help our customers to fast-track the design to launch of space systems and subsystems through an integrated approach which combines technology demonstration missions, experience, a diverse talent pool, and a relentless pursuit of execution speed.

Core Business/Domain of Operation

Satellite and subsystems : Satellite control systems

Launch vehicle and Subsystems : Avionics systems

Test Facilities and Infrastructure

- AADYAH office- Bangalore
- System Level testing lab
- Inhouse no-load and load testing facility for TVC mechanism, control electronics, and avionics

Achievements and Awards

- I4F - Indo-Israel Grant from the Ministry of Science and Technology, Government of India for the development of next-generation AI/ML-driven L2 Autonomous Mission Control System for satellites.
- India-Israel industrial R&D and technology innovation fund (I4F)
- Mission 13 of the Seraphim Space Accelerator Programme
- Stanford SEED 2024

Products and Services

- Satellite
- Thrust Vector Control System (Actuator, MI Sensor, Control Electronics Box)
- Avionics

Organization Type : Startup

- Year of Incorporation : 2016
- Number of Employees : 86

Details of the Key Management

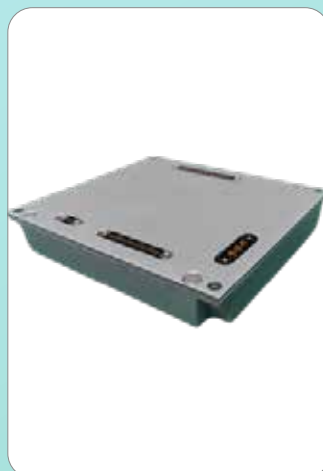
Shaju Stephen
Chairman and Managing Director
✉ shaju.stephen@aadyah.com



Satellite



Thrust Vector Control System
(Actuator, MI Sensor)



Avionics



Business Contact

Jesmin Jose
Senior Business Development Executive
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🌐 <https://aadyah.com/>



Agnikul Cosmos



Company Profile

Agnikul Cosmos is an Indian space technology startup, incubated by the IIT-Madras and is headquartered in Chennai. It has achieved a significant milestone by launching India's first semi-cryogenic Launch Vehicle Agnibaan SOrTeD with the world's first and only single-piece 3D-printed rocket engine, for which it holds a patent. The vision of Agnikul is to bring space within everyone's reach, aiming to enable launches from Anywhere, Anytime, Affordably. Agnikul is committed to developing launch vehicles that are both affordable and customizable according to customer needs. The Agnikul team consists of over 200 engineers and is associated with the National Centre for Combustion Research and Development (NCCRD) at the Indian Institute of Technology (IIT), Madras.

Core Business/Domain of Operation

Launch Vehicle and Subsystems: Launch Services

Test Facilities and Infrastructure

- Engine test rigs for Agnite and Agnilet engines
- Vehicle avionics testing lab, Motor and pump test rig
- Stage qualification test rig

Achievements and Awards

Agnibaan SOrTeD (Sub-Orbital Tech Demonstrator) Mission :

- First-ever semi-cryo engine launch in India
- First-ever launch from a private launchpad in India
- First flight with aviation-grade jet fuel and industrial-grade Liquid oxygen
- World's First flight with a single piece 3D printed engine
- Startup India Recognition - DIPPI3283
- National Startup Award 2022 - Winner in space sector
- Received DSIR certification

Organization Type : Startup

- Year of Incorporation : 2017
- Number of Employees : 247

Details of the Key Management

Srinath Ravichandran
Co-Founder & CEO
✉ srinath@agnikul.in

List of Key Customers

Satellite service providers, Satellite manufacturers

Products and Services

Agnibaana two-stage Launch Vehicle that focuses on providing customizable launch services for Lower Earth Orbit (LEO) using semi-cryogenic technology.



Business Contact

Syed Peer Mohamed Shah Khadri
Co-Founder & COO
✉ moin@agnikul.in

🌐 www.agnikul.in



Anvi Space Pvt. Ltd.



Company Profile

Anvi Space is a pioneering Indian space technology company at the forefront of innovation in space robotics and artificial intelligence. Our primary focus is on developing advanced robotics solutions tailored for space applications, which include robotic arms for spacecraft, in-orbit servicing systems, and autonomous components designed for complex space operations.

Our forthcoming Mission CELEST will highlight the capabilities of our advanced rover, which is equipped with indigenous robotics and AI designed for the exploration of uncharted territories. This mission will serve as a testament to our technological advancements and showcase India's potential in the realm of space innovation.

Our real time Space Game series will be one of the best space experience for everyone.

Informed by India's rich legacy of successful space missions, Anvi Space is committed to developing technologies that tackle global challenges such as space debris and are actively investigating solutions for debris mitigation, including robotic systems capable of active debris removal and collision avoidance technologies, thereby ensuring the sustainability of future space missions.

Core Business/Domain of Operation

Satellite and subsystems: Space Robotics, In-orbit servicing

Test Facilities and Infrastructure

Development area of 30,000 sq ft

Products and Services

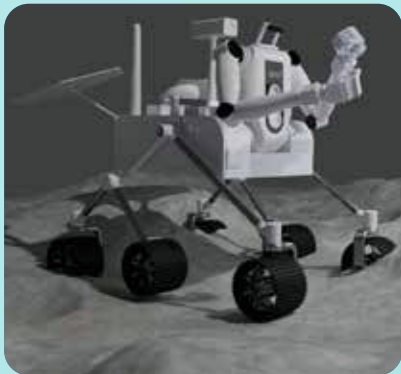
- Developing advanced space robotics solutions
- IN-orbit servicing systems
- Autonomous robotics components
- Planetary exploration rovers
- Innovative technologies aimed at mitigating space debris
- Immersive game that simulates real-time space missions

Organization Type : Startup

- Year of Incorporation : 2024
- Number of Employees : 30

Details of the Key Management

Kisshhan PSV
Founder & CEO
✉ psv@anvi.co



Business Contact

Mahendra G
Manager
✉ hr@anvi.co

🌐 <https://www.anvispace.com>



Ananth Technologies Pvt. Ltd.



Company Profile

ANANTH is into realization of Satellite sub-systems like Digital (TMTC), Controls (AOCE, OBC, BMU), Power (Power control, Shunt, Distribution and DC-DC), Sensors (Star Sensors, Sun Sensors and Earth Sensors), Payload (EPC and TR modules), Solar panels, Mechanism (SADM & DPM) and Harness systems. ANANTH is providing services of spacecraft activities like, AIT (Assembly, Integration and Testing), Alignment, Ground checkout etc. ANANTH has been into realization of launch vehicle on-board systems from past 30 years and successfully delivering various mission critical systems viz. NGC packages, Power modules, Mission computers, Control Electronics, Wheel drivers Electronics, Inertial sensors for Navigation, etc. So far ANANTH has contributed to 99 satellites and 79 Launch vehicles to ISRO.

Core Business/Domain of Operation

- Launch vehicle and subsystems: Avionics Manufacturing
- Satellite and subsystems: Satellite and subsystems Manufacturing
- Satellite applications: Geospatial Services

Test Facilities and Infrastructure

- Assembly, Integration and Testing (AIT) facilities with Class 10K and 100K Clean rooms for Satellite integration
- EGSEs for Spacecraft testing, viz. Data Acquisition Systems, DC Power supplies, Digital Storage Oscilloscopes, Voltage Calibrators, RF & Microwave Test Facilities, RF Power meter, Spectrum Analyzer
- Mechanical fitting lab with Bench drilling machine, Milling machine, Heli coil tool for reworks
- Environmental Test Facilities like Vibration facility, Thermo cycling, Thermo-Vac
- MIC Facilities and Automated SMT production line

Achievements and Awards

- Contributed towards realization of ISRO's Launch vehicles along with Harnessing and stage integration of complete PSLV sub-assemblies & GSLV sub assemblies
- Offered Quality inspection services in electrical and mechanical inspection areas
- Contributed to 99 satellites and 79 Launch vehicles of ISRO

Organization Type : Medium Enterprises

- Year of Incorporation : 1992
- Number of Employees : >1600

Details of the Key Management

Dr. Subba Rao Pavuluri
Chairman & Managing Director (CMD)

List of Key Customers

ISRO, DRDO, ASL, ADE, ARDE and Defence establishment

Products and Services

- On-Board Computers & Control Systems
- Laser & Electro-Optical Systems
- Data Acquisition & Signal Processing Systems
- RF SYSTEMS (Telemetry Transmitters/ Receivers and other systems)
- Customized Power Supply Packages
- Mechanical Systems Integration

Satellite On-board Systems




Launch Vehicle Subsystems



Business Contact

S. Sagar
Vice President-Marketing, BD and Strategy
✉ ssagar@ananthtech.com

 www.ananthtech.com



Dhruva Space Pvt. Ltd.



Company Profile

Dhruva Space Private Limited is a full-stack Space Engineering solutions provider based in Hyderabad, India. Dhruva Space is active across Space, Launch, and Ground segments and supports Civilian and Defense clients worldwide. Dhruva Space offers Satellite/s coupled with Earth Station/s and Launch Service/s as an integrated solution or individually as technology solutions to power Space-based applications on Earth and beyond.

Core Business/Domain of Operation

Satellite and Subsystems: Satellite manufacturer and solar panel

Launch vehicle and subsystems: Deployer

Ground support and Auxiliary services: Ground station services

Test Facilities and Infrastructure

- Class 10,000 Cleanroom satellite AIT
- Helmholtz Cage testing of Satellite AOCS
- Thermo-Vacuum Chamber
- Mission Control Centre to manage Space mission operation

Achievements and Awards

- First private entity to receive end-to-end design and development order for Space-grade Solar Panels
- Receive first authorisation from IN-SPACE for DSOD-1U Mission and for Ground Station as a Service (GSaaS)
- Partnered with Kinéis for Dhruva Space to introduce IoT connectivity in India and launch IoT payload on Dhruva Space P-30 satellite
- Launched two amateur radio communication satellites, Thybolt-1 and Thybolt-2
- Qualified its P-30 Satellite platform launched as 'LEAP' - Technology Demonstrator
- Winner of National Startup Award, Qualcomm Design in India Challenge, 'Business' Innovation for India, Vocational Service Excellence Award 2022-23, Pandit Deendayal Upadhyaya Telecom Skill Excellence Award 2022, Best Breakthrough Technology in Aerospace, Pride of Telangana 2024 Awards
- Founders featured in Fortune India's '40 Under 40

List of Key Customers

TU Wien University, Austria, Defense Client (Unnamed)

Organization Type : Small Enterprises

- Year of Incorporation : 2012
- Number of Employees : 140

Details of the Key Management

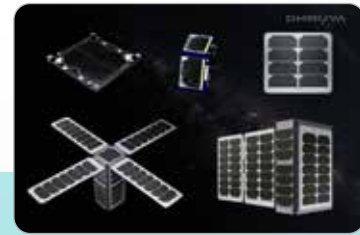
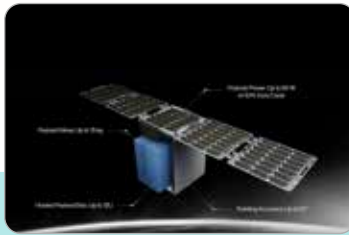
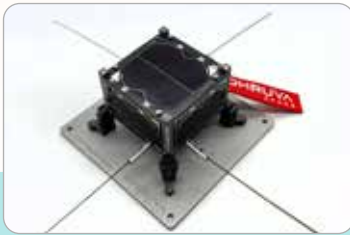
Sanjay Nekkanti

Chief Executive Officer & Co-founder

✉ sanjay@dhruvaspace.com

Products and Services

- Satellite Bus (P30 and P DoT)
- Hosted Payload Solutions For Secondary Payloads
- Solar Arrays for Smallsats, Cubesats, Nanosats
- Satellite Deployer (1U, 3U and 6U)
- Dhruva Space Integrated Space Operations and Command Suite (ISOCS)



Business Contact

Krishna Teja Penamakuru
Chief Operations Officer & Co-founder
✉ krishnateja@dhruvaspace.com



🌐 <https://www.dhruvaspace.com>



Digantara

DIGANTARA

Company Profile

Digantara is a space situational awareness company that is building end – to – end infrastructure to ease space operations and space traffic management. The infrastructure is underscored by the core situational awareness tenets of perception, comprehension, and prediction, enabling users to leverage a persistent sensing network that can identify, track and predict the behaviour of all Resident Space Objects to achieve comprehensive Space Domain Awareness.

Core Business/Domain of Operation

Ground support and Auxiliary Services: Space Situational Services

Test Facilities and Infrastructure

- 25000 Sq Ft facility for satellite and payload integration, mission control center
- Optical payload assembly characterization facility
- Orbital dynamics, flight dynamics and SSA analysis facility

Achievements and Awards

- Established Asia's one of a kind space domain awareness centre
- Global presence with offices in India, Singapore, and the United States
- Launched two missions to orbit for measuring space weather
- key contributors to the U.S.-India initiative on Critical and Emerging Technology
- National Startup Award 2022/23
- ASI Award for Spacecraft and Related Technologies
- ISRO: ANIC ARISE Award
- ET Startup Award

List of Key Customers

Across strategic and commercial sector

Organization Type : Startup

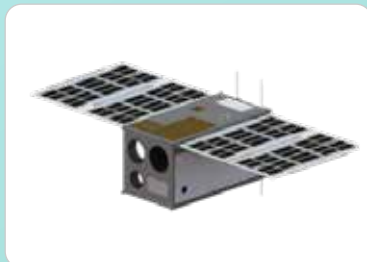
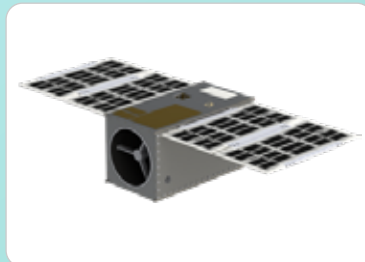
- Year of Incorporation : 2018
- Number of Employees : 60

Details of the Key Management

Anirudh Sharma
Chief Executive Officer
✉ founders@digantara.co.in

Products and Services

- Flight Dynamics as a Service
- Launch and Early Operation Services
- Spacecraft Insurance
- Space Threat Assessment and Response Suite
- Advanced 40 Satellite Space Surveillance Constellation & Complimentary Ground Sensors



Business Contact

Tanveer Ahmed
Chief Technology Officer
✉ founders@digantara.co.in

🌐 <https://www.digantara.co.in>



GalaxEye Space Solutions Pvt. Ltd.



Company Profile

GalaxEye Space is a deep-tech Space start-up incubated under the aegis of IIT-Madras and are currently based in Bengaluru, Karnataka. We specialise in developing a constellation of miniaturised, multi-sensor SAR plus EO satellites. Our new age technology enables all-time, all-weather imaging, this with leveraging advanced processing and AI capabilities, we ensure near real-time data delivery and are glad to highlight that we have successfully demonstrated these imaging capabilities, the first of its kind in the world, across various platforms such as drones as well as HAPS (High-Altitude Pseudo Satellites). Recognised with an iDEX award and backed by Seed investments, our dedicated team of 60 (and growing) is thrilled to announce the upcoming launch of our first SAR (X-band) and PAN plus 6 MS-Bands satellite, offering less than 2 m resolution in the year 2025. In partnership with ISRO, Antaris and SSTL, we aim to enhance Earth Observation for Defence and Commercial applications.

Core Business/Domain of Operation

Satellite and Subsystem: EO and SAR payload

Satellite applications: EO Services

Test Facilities and Infrastructure

- 350 Sq ft Payload Assembly, Integration & Testing Facility
- Linear Rail Test Bed for Radar Testing
- Simulation Lab for Mission Design, Structural Design
- Embedded Lab with VNA, Oscilloscopes and Spectrum Analyse

Achievements and Awards

- IDEX - High speed on board data processing for LEO satellites
- Part of Google accelerator programme for AI startups
- Startup Award at Defence Tech Expo TN

List of Key Customers

- ITC
- Godrej Agrovat
- Devi Seafoods
- DRDO (LRDE)

Organization Type : Startup

- Year of Incorporation : 2021
- Number of Employees : 60

Details of the Key Management

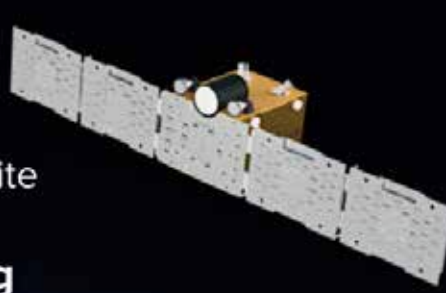
Suyash Singh
CEO

✉ suyash@galaxeye.space

Products and Services

- Hybrid sensor smart satellite constellation
- Satellite Data Sales
- Galaxeye SURV
- GalaxEye Blue

World's first
Multi-Sensor (SAR+EO) Satellite
providing
All time, All weather Imaging







SAR MSI Fused

What do we do?
Provide accurate insights on Cycle Status & Health of Ponds using Satellite Imagery




Business Contact

Dr. Deb Jyoti
Senior VP of Business Development
✉ deb.jyoti@galaxeye.space

🌐 <https://www.galaxeye.space>



HEX2OLABS India Pvt. Ltd.



Company Profile

HEX2O is driving innovation in the space industry by offering modular, scalable satellite platforms and comprehensive mission services that lower entry barriers and accelerate access to space for commercial, defence, and educational sectors. HEX2O is renowned for modular satellite platforms with sizes ranging from 3U to 27U, including subsystems and educational FlatSat systems. We offer a wide range of services, from spacecraft design and fabrication to integration testing, launch services, ground station operations, and data management. Our satellite platforms empower clients to conceptualize, construct, test, launch, and manage nano and microsatellite missions.

We currently have three customer missions planned for the second half of 2025, where we are developing 3U platforms for our customers. We also have two internal technical demonstrator missions scheduled to be launched in Q4 this year, which showcases our dedication to collaborative innovation through partnerships for satellite development.

HEX2O has established substantial collaborations with domestic and international organizations. These include partnerships with UAE Space Agency, LASP, LATMOS, Taiwanese companies like TaiCrystal and Aegiverse. Partnerships with Skyroot Aerospace, Agnikul, Manatsu, TakeMe2Space, and Manatsu in India signifies HEX2O's commitment to advancing space capabilities.

Core Business/Domain of Operation

Satellite and subsystems: Satellite platforms

Ground systems and auxiliary support: Spacetechnology skilling

Test Facilities and Infrastructure

- 1000 sq. ft lab space
- Acceptance & Integration Facility (10,000 ppm cleanroom) for CubeSats

Achievements and Awards

- Customer Missions
- EPS Subsystem listed NASA State of the Art Small spacecraft technology • Partnerships & Alliances with potential players in Industry
- Delivered "FlatSat" to customers which exemplifies our role in fostering training and technological readiness for space endeavours

Organization Type : Startup

- Year of Incorporation : 2023
- Number of Employees : 15

Details of the Key Management

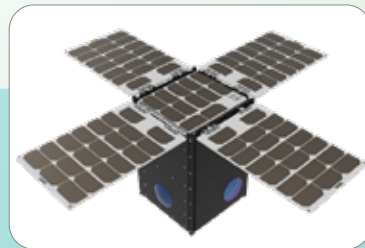
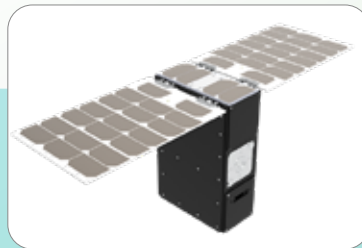
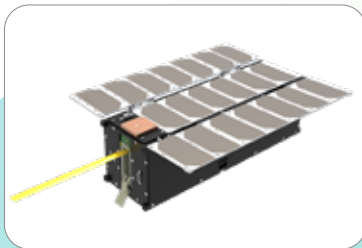
Anurag R
Co-founder & Director
✉ anurag.reghu@hex20.space

List of Key Customers

- UAE Space Agency
- National Central University, Taiwan
- COSPAR
- LASP
- LATMOS

Products and Services

- Satellite Platforms: 3U, 6U, 12U, 27U
- FlatSat (lab based test bed)
- Subsystems
 - Electrical Power System with Battery pack
 - Command & Data handling unit
 - UHF-VHF transceiver
 - Attitude Determination System (Under development)
- Services
 - Spacecraft design
 - Integration & Testing
 - Ground services
 - Mission operations
 - Custom platforms
 - Turnkey missions
 - Training



Business Contact

Aravind M B
Co-founder & Director
✉ aravind@hex20.space

🌐 www.hex20.space



Hical Technologies Pvt. Ltd.



Company Profile

Established in 1988, Hical Technologies is a prominent supplier to the aerospace and defence industries, offering a wide range of products, including Motors, Solenoids, Actuators, Transformers, Precision Machining, Sheet Metal Mechanical Integration, Cable Harnessing and Systems Integration. Serving some of the world's largest aerospace and defence corporations, Hical has developed a reputation for exceeding customer expectations at every stage of engagement, from technology and design to development, manufacturing, and delivery. For Space, Hical has been instrumental in productionizing Electromechanical Actuators for launch vehicles and Compact Rotary Actuators. Additionally, Hical has been selected to design and manufacture Robotic space Arms for space debris collection. Over the years, Hical's commitment to quality and innovation has earned it strong customer loyalty, establishing the company as a reliable partner in high-tech manufacturing.

Core Business/Domain of Operation

Satellite and subsystems: Actuation Systems

Launch vehicle and Subsystems : Actuation Systems

Test Facilities and Infrastructure

- Performance test rigs for motors, actuators, solenoids and transformers
- Environmental test chambers
- Vibration shaker
- Class 10000 clean room with Class 100 laminar flow tables
- Precision machine shop
- Sheet metal fabrication shop

Achievements and Awards

- UTC Supplier Gold Award
- Thales On time delivery Award

List of Key Customers

- | | |
|---------------------------|-------------------------|
| • Thales | • Honeywell |
| • ISRO (URSC, VSSC, LPSC) | • Raytheon Technologies |
| • Boeing | • Eaton |

Organization Type : Large Enterprise

- Year of Incorporation : 1988
- Number of Employees : 850

Details of the Key Management

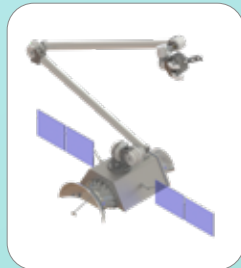
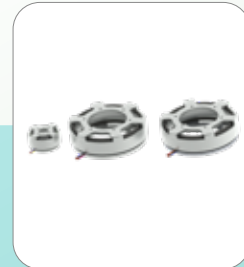
Yashas Jaiveer

Joint Managing Director

✉ Yashas.jaiveer@hical.com

Products and Services

- Robotic Arm
- EM Actuators for Launch vehicles
- Compact Rotary Actuators for Spacecraft Applications
- Stepper Motors
- Coreless Motor and Slot less Motors
- BLDC Motors
- Quadruplex Torque Motors
- Solenoids
- Transformers
- Cable harness and Wiring integration
- Mechanical integration – Sheet metal and machining
- Systems integration



Business Contact

Ashwin Ganesh M
Business Development Manager
✉ Ashwin.m@hical.com

🌐 <https://www.hical.com/>



KaleidEO A SatSure Company



Company Profile

SatSure is a leading Earth Observation (EO) data refinery ecosystem, providing analytics-ready products with industry-specific solutions. Leveraging advances in satellite remote sensing, machine learning, and AI, SatSure develops solutions for decision intelligence, addressing challenges in sectors like BFSI, agriculture, aviation, infrastructure, and utilities.

KaleidEO, a subsidiary of SatSure, is a space tech company that operates as an architect of the Earth Observation Infrastructure-as-a-Service (EO-IaaS) model. Through its offerings in hardware, software, and data analytics, KaleidEO aims to maximize the value generated from Earth Observation for the entire value chain.

Core Business/Domain of Operation

Satellite Applications: EO Services

Satellite and Subsystems: EO payload

Test Facilities and Infrastructure

- Simulation Lab For Mission Design, Structural Design
- Embedded and RF Lab with VNA, Oscilloscopes and Spectrum Analyser

Achievements and Awards

- Winner of AAI Startup Initiative, Agriculture Grand Challenge, ADB Ventures Grant Award
- Top 3 in Asia for MIT Inclusive Innovation Challenge
- Best Enabling Fintech, PICUP Fintech Conference and Awards, 2024
- KaleidEO, First Indian spacetech company to demonstrate edge processing in space and demonstrated aerial testing

List of Key Customers

- | | |
|---------------------------------|---------------------------------------|
| • Banks and Insurance Companies | • ReOrbit, Reliance General Insurance |
| • TransUnion CIBIL | • Rabo Partnerships |
| • Airports Authority of India | • Government of Telangana |

Organization Type : Startup

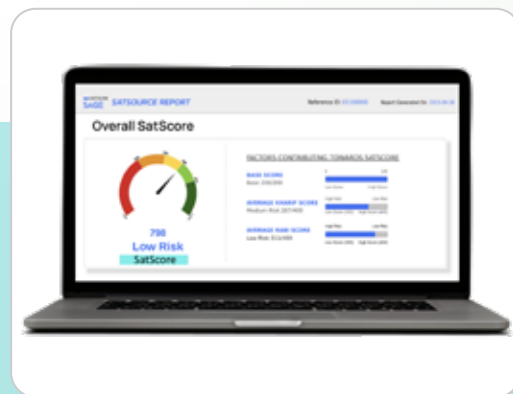
- Year of Incorporation : 2017
- Number of Employees : 150

Details of the Key Management

Prateep Basu
CEO and Co-Founder, SatSure
✉ prateep@satsure.co

Products and Services

- Agriculture: Insurance Risk, Market Potential, Estimate, Procurement Planning, Crop Damage, Assessment
- BFSI: SatSource, SatCollect, Farm Leads, Climate Crop Riskage
- Infra and Utilities: Route Optimisation, RoW Monitoring, Vegetation Management, Damage Assessment, Energy
- Aviation: AIXM, eTOD, AMDB, eAIP, AUP, eCharting, FPD Tool



Business Contact

Arpan Sahoo
COO, and Co-Founder
✉ arpan@kaleideo.co



🌐 <https://www.satsure.co>

🌐 <https://kaleideo.co/>



Larsen and Toubro



Company Profile

India's leading technology, engineering, construction and manufacturing conglomerate – has been closely associated with India's space programme for almost five decades. In collaboration with the Indian Space Research Organisation (ISRO), L&T has successfully realized several systems and sub-systems for launch vehicles and satellites such as rocket motor casings, interstages, nozzles, heat shields, solar array deployment mechanisms and reflector deployment mechanisms. Our manufacturing track record extends to the handling of exotic materials and alloys, including aluminium alloys, nickel alloys, titanium and advanced composites. L&T achieved a significant milestone in consortium with HAL was by winning the contract for industrialisation for 5 PSLVs in 2022.

We have developed and built navigation and exploration systems like 32m wheel and track antenna at Byalalu, PMTR Radar at SDSC SHAR, Sriharikota and Commissioned 22 Ka-Band Ground System Network. L&T has also developed and built critical aerodynamic test facilities for ISRO like hypersonic wind tunnel, shock tunnels – many for the first time in India - and have few precedents worldwide.

Core Business/Domain of Operation

Launch vehicle and subsystems: launch vehicle Manufacturer

Satellite and subsystems: Deployment mechanism

Ground support and Auxiliary services: Ground station establishment

Test Facilities and Infrastructure

- Vibration Test Facilities
- Hydro-pneumatic Test Facilities
- NDT Facilities
- Proof Pressure Testing Facilities
- Anechoic Chamber
- RF testing Facility
- Climatic chambers
- Hardware in loop simulation
- Centrifuge 100 G

Achievements and Awards

- Manufactured more than 350 Rocket motor casings for PSLV and GSLV programmes and several light alloy structures
- Manufactured more than 70% of Crew Escape System in Gaganyaan
- Emerged from subsystems to a system integrator
- Established one-metre hypersonic wind tunnel – one of the world's largest - at the VSSC
- National award for manufacturing competitiveness

Organization Type : Large Enterprise

- Year of Incorporation : 1938
- Number of Employees : 143000

Details of the Key Management

Laxmesh B H

VP & Head Aerospace Systems Business

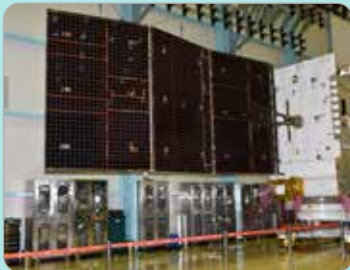
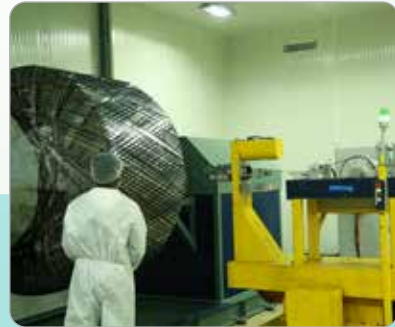
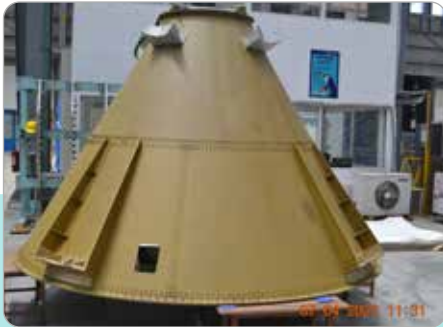
✉ laxmesh.bh@larsentoubro.com

List of Key Customers

ISRO, HAL, NSIL

Products and Services

- Rocket motor casings, Interstages, Nozzles, Heat shields, Solar array and Reflector deployment mechanisms
- Navigation systems and exploration systems, satcom infrastructure, ground testing stations for ISRO thirty meter telescope
- Avionics for Lunar Exploration, Multi Element Integrated Testing, Regenerative Hydrogen Fuel Cell – Lunar Night Survival & Cloud based Mission Control Systems.



Business Contact

Shri Raghavendra BM
Sr DGM –Marketing and Business Development
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🌐 www.larsentoubro.com



MANASTU SPACE

Manastu Space Technologies

Company Profile

Manastu Space Technologies is revolutionizing satellite operations with its advanced green propulsion systems and comprehensive services. Its hydrogen peroxide-based propulsion technology offers a safer, non-toxic alternative to conventional hydrazine fuels, enhancing satellite performance while minimizing environmental and operational risks. In addition to propulsion, Manastu provides essential satellite services such as de-orbiting, in-space refueling, and life extension, allowing satellites to operate longer, reducing the need for frequent launches, and addressing the growing issue of space debris.

These services ensure satellites can be safely de-orbited at the end of their life cycle, extend their operational life through refueling, and maintain functionality for extended periods, optimizing the overall cost and sustainability of space missions. Manastu's focus on creating sustainable, efficient, and safe satellite operations positions the company as a key contributor to the evolving global space industry.

As part of its growth strategy, Manastu is forging international partnerships with satellite manufacturers and space agencies, aiming to expand its presence in global markets. The company's innovative solutions are designed to meet the increasing demands of modern satellite operations, enabling safer and more sustainable exploration of space.

Core Business/Domain of Operation

Satellite and subsystems : Propulsion Systems, Satellite life extension

Test Facilities and Infrastructure

- Vacuum chamber
- HAT for mN to 10N thrusters
- Ground thruster testing facility for mN to 300 N
- Propellant development facility
- Catalyst development facility
- Manufacturing QA QC laboratory

Achievements and Awards

- Top 5 Start-Ups In The World at Hello Tomorrow, Paris 2020
- Dare to Dream Award By DRDO 2019
- S-Booster Award By Japanese Govt And JAXA 2019
- IIGP Award By Lockheed Martin And DST and TATA Trust 2018
- Top 10 Startups in the World At IAC, Bremen, Germany - Biggest Space Conference

Organization Type : Startup

- Year of Incorporation : 2017
- Number of Employees : 50

Details of the Key Management

Tushar Jadhav
Director & CEO

✉ tushar.jadhav@manastuspace.com

List of Key Customers

- DRDO
- Latitude
- iDEX

Products and Services

- Green Propulsion Systems: A hydrogen peroxide-based propulsion system
- De-orbiting Services
- In-space Refueling Services
- Life Extension Services



Business Contact

Isha Rajee
Sr. Lead, Business Development
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🌐 <https://www.manastuspace.com/>



OrbitAID Aerospace Pvt. Ltd.



Company Profile

OrbitAID aerospace is first Indian Startup developing life extension solutions for current and upcoming satellites in space, through On-orbit refuelling. On-orbit refuelling enables a paradigm shift in satellite on-orbit operations. Integrating on-orbit refuelling as part of the space ecosystem dramatically lowers the operational costs and enables dynamic satellite operations. The on-orbit refuelling market is poised to grow at 103.8% CAGR finding applications in military, defence and commercial markets. OrbitAID estimates an average of 15X ROI for customer for availing a refuelling service in orbit. Beyond financial gain, on-orbit refuelling opens endless possibilities for satellite mobility for orbit maintenance, repositioning, de-orbiting, surveillance and more. OrbitAID has creating accessibility for on-orbit refuelling through a dual-docking, zero-leak integrated docking and refuelling interface to cater to satellite developers across LEO, GEO and cis-Lunar orbits.

Core Business/Domain of Operation

Satellite and subsystems: On orbit refuelling

Test Facilities and Infrastructure

- High pressure fluid transfer facility.
- Autonomous docking on robotic arm platform.
- Air-bearing platform for simulating on-orbit docking.

Achievements and Awards

- 4.5Cr. Funding from TANSIM (Government of Tamil Nadu, StartupTN)
- 1st Indian company among Startburst portfolio.
- Selected in Creative Destructive Lab (CDL) Space Cohort 2024.
- Space innovation challenge – TechConnect finalist – Washington DC
- Amongst top 20 emerging space startups globally by StartUs Insights.
- MSME Hackathon 2022 winner.

List of Key Customers

- Space agencies
- Earth Observation constellations
- Telecom satellite owners
- Military & Défense.

Organization Type : Startup

- Year of Incorporation : 2021
- Number of Employees : 11

Details of the Key Management

Sakthikumar Ramachandran
CEO & Founder
✉ sakthi@orbitaid.com

Products and Services

- OrbitAID has developed a proprietary integrated docking and refuelling interface (S.I.D.R.P), capable of autonomous docking, refuelling, data transfer and power booster capabilities.
- OrbitAID has developed an integrated propulsion system for volume reduction and improved preparedness for on-orbit refuelling.



Business Contact

Sakthikumar Ramachandran
CEO & Founder
✉ sakthi@orbitaid.com

 www.orbitaid.com



Skyroot Aerospace



Company Profile

Skyroot Aerospace provides affordable, reliable, and on-demand launch services for small satellites with our Vikram-series rockets. Founded by former ISRO scientists Pawan Kumar Chandana and Naga Bharat Daka, we are India's first private company to successfully launch a rocket into space. Our team of 320+ rocket scientists and engineers bring 2000+ years of combined rocketry experience to every mission.

At our state-of-the-art facilities located in Hyderabad, Telangana, we design, develop, manufacture, and test high-quality aerospace components leveraging advanced materials and processes, including carbon composite structures, miniaturized avionics, and 3D-printed engines. Our mission: Opening Space for All.

Core Business/Domain of Operation

Launch Vehicle and Subsystems: Launch Services

Test Facilities and Infrastructure

- Five state-of-the-art rocket manufacturing facilities
- Pressure chamber for flex seal qualification
- Trial actuation setup for flex nozzle qualification
- 3-axis rate table for testing
- Environmental testing lab
- Liquid and cryogenic engine test setup
- Laser tracker for measurements
- Filament winding machine for composite rocket motor casing
- Class ISO 7&8 Clean Room
- Fiber cutting machine
- Fabrication workshop for manufacturing composite structures
- Autoclave oven for curing composite structures
- Avionics testing in ESD lab
- Test stands for hot firing of 3D-printed components
- Rubber roll mill for thermal insulation material manufacturing

Achievements and Awards

- Scaled to a team of over 300+ talented space professionals
- Established 5 state-of-the-art manufacturing facilities
- Secured ~\$100 million in funding, the largest capital raise for any Indian space startup to date
- Winner of Technology Startup Award 2022
- Winner of National Startup Award 2020

Organization Type : Startup

- Year of Incorporation : 2018
- Number of Employees : >300

Details of the Key Management

Pawan Kumar Chandana
Co-Founder and CEO
✉ pawan@skyroot.in

List of Key Customers

Satellite manufacturers with high frequency launch services

Products and Services

Stage-1 CRMC, 3D printed liquid/cryogenic engines, interstage structures, avionics modules



3D-Printed Dhawan-I
Cryogenic Engine



Carbon Composite Interstage
Structures



3D-Printed Raman-II Liquid
Propulsion Engine



Vikram-1 Stage-1 Kalam 1200 Solid
Rocket Motor Case

Business Contact

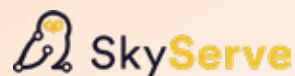
Sireesh Pallikonda
VP, Business Development Launch Services.
✉ sireesh@skyroot.in



🌐 <https://skyroot.in/>



SkyServe



Company Profile

SkyServe is an AI & edge computing technology company for satellite and airborne platforms, allowing analytics providers and core industries to deploy applications for earth observation and other space-based solutions onboard these platforms for rapid and real-time insights. SkyServe's expertise lies in making conventional space-based assets smarter by enabling them with AI-powered onboard data processing capabilities, paving a path for sustainable space operations and further downstream value chains. SkyServe has built an ecosystem of products for earth observation, which empowers the stakeholders including satellite operators, geospatial developers and end-users for seamless integration of systems and adaption of the technologies.

Core Business/Domain of Operation

Satellite Application: EO Services, Edge Computing

Test Facilities and Infrastructure

- Dedicated edge computing and AI lab: 100sq.ft temperature and humidity-controlled lab with GPUs and Servers with UPS support, hosts flight-qualified hardware
- Testing Hardware & Rigs, including carrier cards, engineering models, and voltage meters

Achievements and Awards

- ESA PhiSat-2 #OrbitalAI Challenge Winners
- "Startup of the Year" award by Geospatial World at Geospatial ArthaSubmit 2024
- Geoawesomenes "Global Top 100 Geospatial Companies" 2024 edition
- 14th Annual Aegis Graham Bell Awards, Top3- Innovation in AI
- Executed maiden mission, Mission Matterhorn deploying SkyServe STORM onboard D-Orbit's ION SCV-004 in April 2024

Organization Type : Startup

- Year of Incorporation : 2020
- Number of Employees : 25

Details of the Key Management

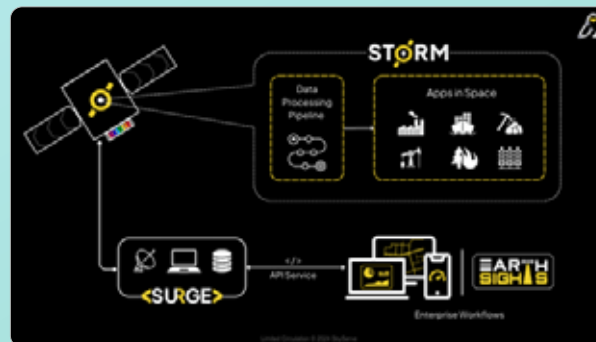
Vinay Simha
Chief Executive Officer
✉ vinay@skyserve.ai

List of Key Customers

- ISRO
- NASA JPL
- Indian Defense
- D-Orbit
- Loft Orbital
- SatRev
- SatSure
- Vasundharaa

Products and Services

- **STORM**: Sensor-agnostic edge computing platform
- **SURGE**: A software suite, acting like a simulated environment of STORM
- **EarthSights**: An interactive dashboard to visualise satellite-based insights



Business Contact

Goutam Naik
 Founder's Office Executive
 ✉️ goutam@skyserve.ai

✉️ partner@skyserve.ai



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Tamboli Castings Ltd.



Company Profile

Tamboli Castings Limited is a technology leader in manufacturing of ready to use machined investment castings and components. We have an installed capacity of 600 TPA depending on the product mix and world class facilities for manufacturing of investment castings and subsequent CNC machining.

We have installed robotics for manufacturing process and a battery of high technology CNC machines in-house to offer ready to use components to its customers. We are certified with AS 9100D, IATF 16949, ISO 14001, OHSAS 18001 and have also been verified in accordance with ISAE 3410 (GHGs), Certification ISO 14064-1 for Zero Carbon emission.

We specialize in manufacturing and supplying critical components for semi-cryogenic and cryogenic engines in ferrous and non-ferrous material grades through Investment Casting process and has a strong track record of delivering it on-time to space organisations. Our solutions are designed to meet the stringent requirements of aerospace sector, and we are confident in our ability to support ISRO's pioneering projects. We are also supply partners to Marquee fortune 500 companies to industries like Automation, Robotics, General Engineering, Aerospace, Automotive, Pharma, Locomotives etc. We strive for the best and we are known by our customers for our high quality and dependability.

Core Business/Domain of Operation

Launch vehicle and Subsystems : launch vehicle component manufacturing

Test Facilities and Infrastructure

- Centrally air-conditioned and humidity controlled Wax Pattern Shop and Robotic Shell Room.
- High frequency Induction Melting Furnaces and Muffle, Gas Carburising, Forced Air Circulation Tempering Furnaces for Heat Treatment process.
- In-house Mechanical Testing and NDT Testing Facility, ISRO approved ancillary facility for Radiography Test.
- Carl Zeiss make Coordinate Measuring Machine (CMM)
- Contourscope and 3D optical scanner to measure for surface roughness and radius.
- SCADA System
- Well established CNC Machine Shop with 40+ CNC Machines and Overall Equipment Effectiveness (OEE) installed.

Organization Type : Medium Enterprise

- Year of Incorporation : 2004
- Number of Employees : 500

Details of the Key Management

Vaibhav Bipin Tamboli
Chairman

✉ v.tamboli@tambolicastingslimited.com

Achievements and Awards

In-house Tensile Testing Machine and Heat Treatment facility approved by ISRO

List of Key Customers

Indian Space Research Organisation (ISRO) and Larsen & Toubro

Products and Services

Critical Aerospace components for cryogenic and semi-cryogenic engines.



Business Contact

✉ dm1@tambolcastingslimited.com

🌐 www.tambolcastingslimited.com



XDLINX Space Labs



Company Profile

Founded in 2022, our company has evolved towards innovation in the space technology industry, driven by ambition and the constant pursuit of excellence. XDLINX Space Labs is a satellite as a service company engaged in building Nano and Micro class of satellites. Today, XDLINX has a dedicated team of 75 engineers bringing unique expertise to our mission. Together we have become a force to be reckoned with in the space industry.

XDLINX Labs join forces with Almagest Space Corporation to revolutionize space communication for ultra-speed broadband via E-band technology

JANUS-1 satellite that rode on Isro's new mini-rocket SSLV-D2 and reached its orbit successfully on Friday is the world's first satellite fully conceived, designed and manufactured using an Indian company's end-to-end cloud platform.

Core Business/Domain of Operation

Satellite and subsystems: Satellite bus, EO and SigInt payloads

Ground system and Auxiliary Services: Mission Planning and Midstream Solutions.

Test Facilities and Infrastructure

- Clean Room
- Partner Labs: Thermo Vac (ATL), Shock & Vibration, Antenna Test Facility (Astra)
- Groundstation (under Development)

Achievements and Awards

- E Band Payload about to be launched on our Nano Satellite Platform
- Development of Micro Satellite Platform for Galaxyeye
- Successfully Launched satellite (Janus 1) into Space within 1 year of incorporation
- MOU's Signed with global companies to launch various payloads (Transclstial – Singapore) Nethra Indonesia,
- Launch manifest: Janus-2, Elevation-1, ThirdEye-1, Drishti-1, Hosted Payload.

List of Key Customers

- | | |
|--|-----------------|
| • Almagest Space Corporation | • Antaris Inc., |
| • GalaxEye Space Solutions Private Limited | • Inspacity |
| • E-Space Inc., | • Manastu |

Organization Type : Medium Enterprise

- Year of Incorporation : 2022
- Number of Employees : 78

Details of the Key Management

Mr.Rupesh Gandupalli

Founder & CEO

✉ rupesh@xdlinx.space

Products and Services

- Satellite platforms with hosted payloads
- Intelligence, surveillance, and reconnaissance system



Business Contact

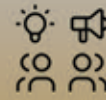
Mr. Anil Thapa
Head of Marketing
✉ anil.thapa@xdlinx.space

<https://xdlinx.space/>

प्राधिकृतक
AUTHORISER



संवर्धक
PROMOTER



Authorise space activities of Non-Government Entities (NGEs) as guided by the Indian Space Policy

Act as a single-window agency for the private sectors engagement in space



Strategic vision for the Indian space sector

Industry outreach



International outreach

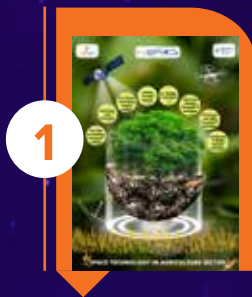
Public outreach



Position India as a spaceport for the world



SHORT TERM SKILL DEVELOPMENT COURSES



1

Essentials of Space Technology for Agriculture Sector



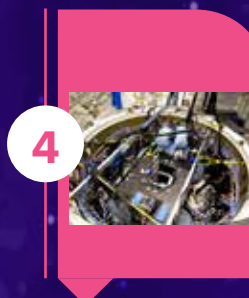
2

Fundamentals of Orbital Mechanics, Attitude Dynamics and Control, Space-Based Navigation and Mission Planning



3

A2Z of Satellite Technology



4

Foundation of Mission Design and Avionics development for Launch Vehicle



5

Essentials of Space Data Products and Services



6

Introduction to Advances in Propulsion System for Launch Vehicles, Satellites and Landing Missions



7

Essentials of Space based Communication and Navigation Systems



8

Rocket Modelling for Students & Academia



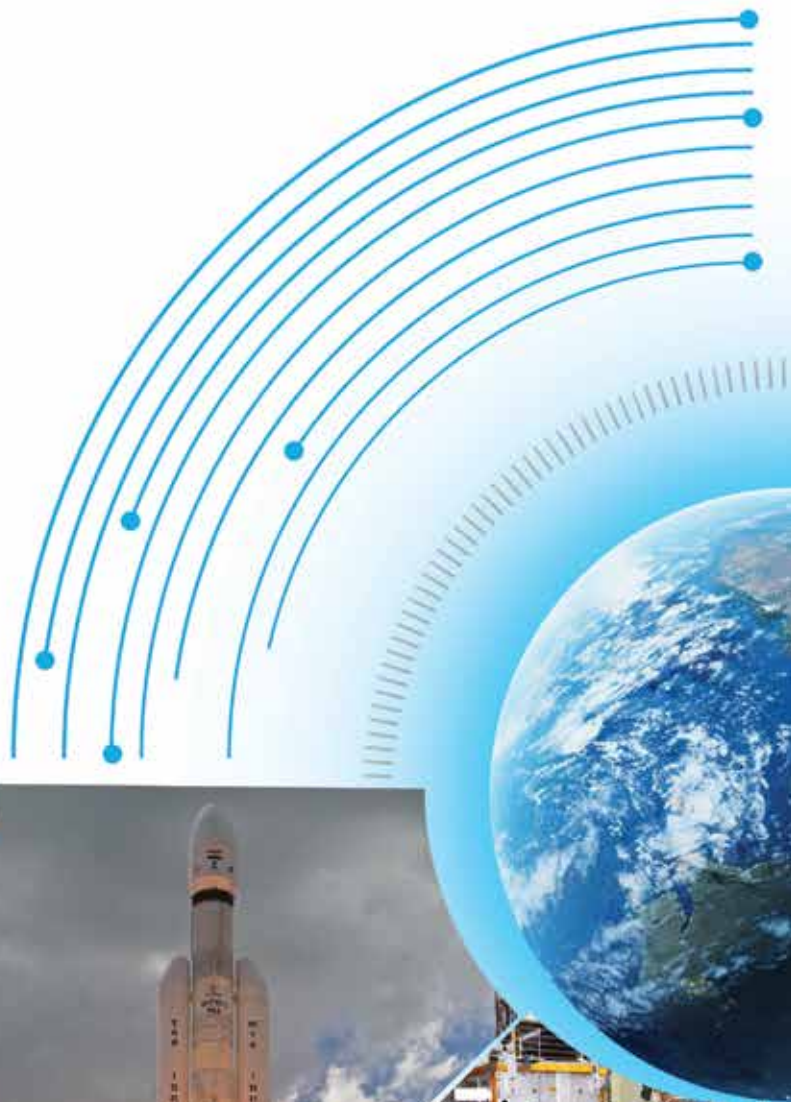
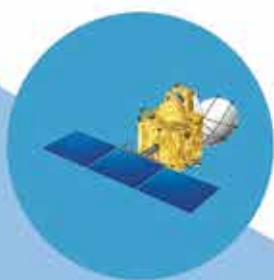
9

Fundamentals of Launch Vehicle Technology



10

Space Economics, Law & Benefits



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The information in this booklet is provided by Indian space industry/startups, IN-SPACe has not verified its accuracy.

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